



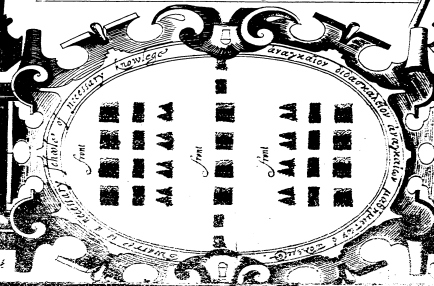
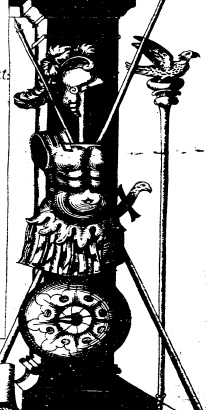
THE TACTIKS OF ÆLIAN

Or art of embattailing an army
after y^e Grecian manner

Englisht & illustrated wth figures throughout
& notes upon y^e Chapters & y^e ordinarie
motions of y^e Boabange n^o 13.

The exercise military of y^e English by y^e order
of that great Generall Maurice of
Nassau Prince of Orange &c
Gouvernor & Generall of y^e
united Provinces in aduice

By Letters from Maurice his B^e & are to be sold at
his House at y^e signe of y^e Tiger Gate
in Dordrecht Church-yard



Printed in London

Woudrichem in Holland



TO THE HIGH AND
MIGHTY CHARLES, ONLY

SONNE OF HIS MAIESTY, PRINCE OF
Wales, DUKE of Cornewall, Yorke, and Albany, MAR-
QUISSE of Ormont, EARLE of Chester, and Ross,
LORD of Admanoch, and KNIGHT of the
most noble order of the Garter.



Ow much the *Gracians* excelled all o-
ther Nations in the Sciences called
Liberall, is better knowne in gene-
rall, then needfull at this time parti-
cularly to be rehearsed to your *Highe-
nesse*. The *Romans* themselues albeit
otherwise ambitious, and out of mea-
sure thirsty of honour, and challen-
ging to themselues the highest degree of grauity, constan-
cie, greatnesse of minde, wisdom, faith, and skill of war,
contended not herein, but freely left them the possession
of that praise vnquestioned. For warre it is not my pur-
pose at this time to make comparifon, or commit the two
Nations together. The controuersie is already moued by
other, and hangeth vndecided in the Court of learning.
Thus much, me thinks, I may truly affirme, that the *Gra-
cians* were the first, that out of variety of actions, and long
experience reduced the knowledge of Armes into an Arte,
and gaue precepts for the orderly mouing a Battaille, and
taught, that the moments of victory rested not in the

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hands

hands of multitudes, but in a few men rightly instructed to manage armes, and trained vp in the obseruation of the discipline of the field. In which regard they had almost in all Cities amongst them Masters of Armes, whom they called *Tacticks*, which deliuered the Arte Military to such, as were desirous to learne. Out of whose Schooles issued those chiefs of warre in number so many, in skill so exquisite, in valor so peerelesse, in all vertues befitting great Generals so admirable, that no Nation of *Europe* euen to this day hath been able to match, much lesse to ouer-match their fame, and glory. And the time was when the *Lacedemonians* exceeded the rest in Martiall skill, and were thought to be the best Souldiers of *Greece*; by means whereof they aduanced themselues to the Principality of *Greece*, which they held with such reputation, that an enemy by the space of 500 yeares was not seene within their Territory. Till at last growing insolent, and surfeiting of, and being not able to brooke their owne fortune, they sought to oppresse, and with wrong and force to possesse the City of *Thebes*, and stirred vp *Epaminondas* a *Theban* by birth, and from his tender yeares nourished by his fathers care in the study of Philosophy, and the science of Armes, to oppose against them, who in two battailes, the one at *Leuctra*, the other at *Mantineia* so broke their forces, that from that day forth they were neuer able to recouer their wonted authority, and power in the field. *Philip* the sonne of *Amyntas* King of *Macedonia*, being but a priuate man, was deliuered as a hostage to the *Thebans*, & brought vp in the same house and learning with *Epaminondas*. He afterward became King of *Macedonia*; which being of it selfe but a poore kingdom, and before his time sometimes kept vnder by the *Athenians*, sometimes by the *Lacedemonians*; sometimes by the *Thebans*, & finding it at his entrance

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to the Crowne harried, and spoiled by the *Paonians*, and forced to pay tribute by the *Thlyrians*, by erecting a new arte, and discipline of warre, to which he exercised, and enured his *Macedonians*, he not only freed his Countrey from the Barbarous nations, but also ouercame the *Gracians*, accounted the only Masters of armes till that day, and caused himselfe to be declared Generall of *Greece* against the *Persians*: against whom after he had made his full preparation, he resolved to go in person. But being preuented by death, he left the succellion of his kingdom, and execution of his designes to *Alexander* his sonne, whom he had before curiously instructed in the discipline of Armes inuented by himselfe. The same *Alexander* (being about 20 yeares of age) after he had vanquished *Darius* in 2 great battailes in 12 yeeres ran through, and subiected the spacious, rich, and flourishing kingdomes of *Asia*, euen as far, as the *East Indies*, and with terror of armes made the whole world to tremble at his name. His kingdomes were after his death diuided amongst many Successors, who by the same Arte military easily maintained the possession of their conquests. This Arte is it, that I at this time present vnto your Highnesse. It was comprised in writing by many, and yet none of their works attained our age, but only that of *Aelian*; who hath in a small volume so expressed the arte, that nothing is more short, nothing more linked together in coherence of precepts, and yet distinguished with such variety, that all motions requisite, or to be vsed in a Battaile are fully expressed therein. *Aelian* liued in the time of *Adrian* the Emperor. How much the booke was of ancient time eiteemed may appeare by this alone, that *Leo* a succeeding Emperor setting downe Martiall instructions for the gouernment of his Empire, transcribeth whole passages out of *Aelian*, & whensoever he citeth, or nameth the *Tacticks*, he giueth still the first place vnto *Aelian*.

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Howbeit

Howbeit the practise of *Aelians* precepts hath long lien wrapped vp in darknes, & buried (as it were) in the ruines of time, vntill it was reuiued, & restored to light not long since in the vnited Prouinces of the low-Countries, which *Countries* at this day are the Schoole of war, whither the most Martiall spirits of *Europe* resort to lay downe the Apprentiship of their seruice in *Armes*, and it was reuiued by the direction of that Heroicall Prince *Maurice* of *Nassau*, Prince of *Orange*, Gouvernour, and Generall of the said *Countries*, a Prince borne and bred vp in *Armes*, and (beside the completenes of his other eminent vertues) for skill, experience, iudgement, and military literature comparable to the greatest Generals, that euer were. I haue of late aduentured to take from *Aelian* his *Greekish* cloake, and to put him in *English* apparel, that in that habit he might attend your Highnesse, and be ready with his seruice, in case he were thought worthy of employment. He had before for his Patron *Adrian*, an Emperour, and Ruler of the *Roman* world. Now he humbly crauech your HIGHNESSE fauour for his protection, who as in Princely descent, and succession of Royall blood you are farre superior, so in vertues worthy of your birth, and yeares, and in all hopefull expectations are you nothing inferior to *Adrian*. It may please your Highnesse to regard him with a gracious eye, and to esteeme the Presentor of him your faithfull bedefman, that will not cease to pray to the mighty God of hostis, to giue you conquest ouer all your enemies. From my Garrison at *Woudrichem* in *Holland* the 20 of September 1616.

Your Highnesse most humbly
devoted,

IO: BINGHAM.



THE TACTICKS OF *ÆLIAN*
or art of embattailing an army after the
Grecian manner.



THE *Grecian* arte of embattailing an army (most mightie *Augustus Cesar Adrian*) the antiquitie whereof reacheth back to the age wherein *Homer* lyved, hath bene committed to writing by many, whose skill in the *Mathematicks* was not reputed equal with myne: whereby I was induced to thinke it possible for me soe to deliver the groundes therof, that posteritie should rather regard and esteeme my labors, then theirs, that before me haue handled the same argument. But weighing againe myn own ignorance (for I must confesse a truth) in that skill & practise of armes, which is now in esteeme among the *Romaines*, I was by feare withheld from reuiving a science half dead, as it were, and since the invention of that other by your auncestors, altogether out of request and vnregarded. Notwithstanding comming afterward to *Formie* to doe my dutie to the Emperour *Nerva* your maiesties father, It was my fortune to spend sometime with *Frontine* a man of Consular dignitie, and of great reputacion by reason of his experience

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in militarie affaires: and after conference with him perceiving he imparted no lesse studie to the *Grecian*, then to the *Romaine* discipline of armes I began not to despise that of the *Grecians*, conceiving that *Frontine* would not so much affect it, if hee thought it inferiour to the *Romaine*. Having therefore in times past framed a project of this worke, but yet not daring then to publish it in regard of your majesties incomparable valour, and experience, which make you famous about all Generalls without exception, that ever were: I haue of late taken it againe in hand, & finished it, being (if I deceaue not my self) a worke both worthy to be accompted of, & of sufficiency, especially with such as are studious of the arte, to obscure the credit of the auncient *Tacticks*. For in respect of the perspicuitie I dare bouldlie affirme, the reader shall more advantage himselfe by this little volume, then by all their writings: such is the order and methode, I haue followed. Howbeit I durst scarcely offer it to your majestie who haue bene Generall of so greate warres, least happily it proue too too slender a present, & altogether vnworthy of your sacred vewie. And yet if your majestie shall bee pleased to thinke of it, as of a *Greekish Theorie*, or a various discourse it may bee, it will giue you some little delight, the rather because you may therein behold ⁴ *Alexander the Macedons* manner of marshalling his fields. And for that I am notignorant of your majesties more weightie affaires, I haue reparted it into chapters, to the end you may without reading the booke in few wordes take the somme of that, which is to bee delivered, and without losse of time find the places you are desirous to peruse.

Notes.

Notes.

THE TACTICKS As *Taxis* in a general sense signifieth order, so *Tacticos* is as much, as pertaining to order: but specially taken, it signifieth partying to order of a battaile, or to the embattailing of an army. Hereof the arte of embattailing an army is called *Tactice*, and hee, that is skillful, and experienced in that arte. *Tacticos* (^a *Vegetius* nameth him *magistrum armorum*) and the books written of the arte, *Tactica*. And that this is the true signification of the word may appeare by *Xenophons Cyropadia*, where the arte *Tactick* is distinguished from the arte *Imperatory*, or arte of a Generall. Hee induceth *Cyrus*, in a discourse with his father speaking thus: ^b In the end you asked mee what my master taught mee, when hee professed to teach the arte *Imperatory*. And when I answered, the *Tacticks*, you smiled, and asked particularly, what the *Tacticks* availed without provision of things necessary to lue by? what without preservation of health? what without knowledge of arts invented for the vie of warre? what without obedience? so that you plainly shewed, that the *Tacticks* are but a small portion of the arte *Imperatory*, or of commanding an army. Thus *Xenophon*: making a difference between the arte *Imperatory*, & the arte *Tactick*. And in other place hee speaketh yet more particularly: ^c *Cyrus*, sayd hee, esteemed it not the duty of a *Tactick* to enlarge onely, or to stretch out in length the front of his *Phalange*, or to draw it out in depth, or to reduce it from a winge to a *Phalange*, or to countermarche readily, the enemy shewing himselfe on the right, or left hand, or in the rear, but to diuide it, when need is, & to place euery part for most advantage, & to leade it on speedily, when occasion is of prevention. Yet sometimes in a general signification books entituled of the whole arte of warre are called *Tacticks*: as the *Constitutions military* of the Emperour *Leo* are entituled *Tactica Leonis*, perhaps of the best parte, because hee ^d the arte of embattailing an army hath alwayes been esteemed the chiefest point of skill in a Generall. Howbeit *Ælian* in his title of this booke taketh *Tactice* in the straighter signification: as appeareth by the definitions, he allegeth out of *Æneas* and *Polibius*, of whom the first defineth the arte *Tactick* to bee a science of warlike motion; with whom also ^e *Leo* agreeth: the other, to bee a skill, whereby, a man taking a multitude seruicable, ordereth it into files, and bodies, and instructeth it sufficiently in all things appertaining to warre. Which two definitions comprehend in few words the argument of the whole booke. For first *Ælian* intreateth of leuieing, & of arming men, then of filing, next of joyning files, and making bodies, after of ordering the whole *Phalange*, or battaile, further of motions requiste to affront the enemy whersoever he giueth on, whether in front, flank, or reare; lastly of marching, and of the sondry formes of battailes carieng with them advantage of charging or repulsing the enemy in your marche. He; that will surer her vnderstand the boundes of this arte, let him reade in the 21. chapter of *Leo* the 58. section.

1 The Emperour *Nerva* your maiesties Father The Emperour *Nerva* here mentioned was not *Nerva Cocceius*, whose succeeded *Domitian*, but *Vlpius Traianus*, who was also called *Nerva*, because he was adopted by *Nerva Cocceius*, & succeeded in the Empire. And where *Ælian* termeth him *Adrians* father, indeede *Adrian* pretended, he was *Traians* sonne by adoption. But ^f *Dio* plainly denieth it, & *Spartian* saith, some reported hee was adopted by the faction of *Plotina* (*Traians* wife) by substituting one to speake with a faint voice, as if it had bene *Traian* vpon his death-bed, whereas *Traian* was before departed this world. This is agreed, that he was *Cosin*

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Dio & Spartian in vita *Adrianis*.^a Veget. prelog. lib. 1.^b Xenoph. cyrop. lib. 2. §. 127.^c Xenophon cyrop. lib. 8. §. 127.^d Plotin. Philo. p. 100. infra cap. 1.^e Leo. cap. 1.

The Tacticks

German once removed to Traian, & that his father dieng, he (being but ten yeares olde) was ward to Traian (then a private man) and to one Calius Tattianus.

To spend some time with Frontine [Frontine heer mentioned was the same that wrote the booke of Strategie, now extant, & commonly ioyned in one volume with Vegetius. He was a man curious in the searche of the Gracian discipline, as may be scene by his owne preface to his booke of Strategie: & by the testimony of Elian, & in the first chapter of this treatise, is reckoned amongst the Tactick writers. * Vegetius reporteth he was much esteemed by the Emperour Traian. Hee lived also in greates reputation in the time of Vespasian: at least if it bee hee, that Tacitus speaketh of in the life of Iulius Agricola. And yet it might bee hee very well, there being noe more then twenty yeares, & certaine monthes betwixt the reignes of Traian, & the reignes of Vespasian in whose time Frontine is reported by Tacitus to have overthrowne the Silures in Britaine. Elian in the next chapter calleth him Fronto. Of one Fronto, that was Consul in the third year of the reignes of Traian, I read in Dio. who's saying is reported to have been: That it was ill to haue an Emperour, vnder whom noe man might haue liberty to doe any thing, but much worse to haue an Emperour, vnder whom every man might doe what hee list. But this Fronto was not Elians Fronto. Hee was called Marcus Cornelius Fronto; this (that Elian speaketh of) Iulius Frontine. And yet it is noe wonder that Frontine in Latine should be called Fronto in Greeke, it being vsual for the Gracians to varie, and deflect a litle from the property of the Latine names.

3 Your maiesties incomparable valor & experience.] That this praise given Adrian is not altogether without cause, may appeare by that, which^a Elius Spartianus writeth in the life of Adria. His wordes haue this meaning: After this, taking his journey into France, he was bountifull to all, as he sawe cause. From thence hee passed into Germany, & being rather desirous of peace, then warre, yet hee so exercised his souldiers, as though warre were at hand: teaching them to endure paines & hardnesse, himselfe giving an example of military life: gladly also vsing Camp fare, as namely lard, & cheefe, for meate, & water mingled with vineger for drink, in imitation of Scipio Emilianus, & of Metellus, & of Traian the author of his preferment & rising, bestowing rewardes vpon many, honors vpon some, to encourage them to beare such things, as seemed harsh in his commaundes. And surely it was hee next Octavius, that vpheld military discipline (declinyng now through the remissenesse of former Emperours) by ordering both the places of Commaunde, & the payes; never suffering any man to absent himselfe from the Campe, but vpon iust cause: measuring the worthe of Tribunes not by fauour of the souldiers, but by their owne desert; exhorting, & exciting all the rest by example of his owne vertue, whilst hee often marched twenty miles on foote, being fully armed, broke downe banqueting howses, and galleries, & vaults for coolenesse, & arbors, wherefoever hee found them in the Campe, & was seene in a plaine garment vsually; wore a baudricke not garnished with gold, buttons without gemmes; scarcely allowing an ivory handle to his sword; visited his sick souldiers in their lodgings, himselfe chose out the grownd to campe in: made noe Capitaine, but a man of a strong body, noe Tribune, but with a growne beard, or of age, that by prudence, and yeares was able to sway the weight of the place: nor suffered him to take ought from the souldier; removed all delicacies, and lastly reformed their armes, and baggage. Hee had besides consideration of the age of souldiers, allowing none younger, then was befitting vertue; nor elder, then stood with the lawes of humanity, to bee conseruant in the Campe. contrary

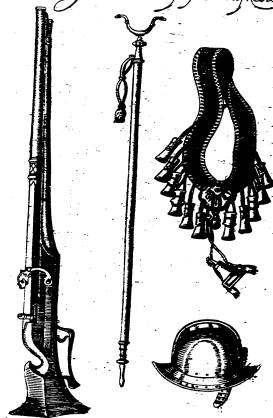
^a Veget lib. 1. cap. 1.

^b Tacit. in vita Agricole.

^c Dio in vita Nerva.

^d Spartian. in vita Adriani.

The armes of y^e Musketer



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The



The Authors that haue written Tacticks; of this booke, and
of the profit of the Arte.

CHAP. I.

HOMER the Poet seemeth to be the first, (at least we read of) that had the skill of imbattailing an Army, and that admired men indued with that knowledge; as appeareth by *Mnestheus* of whom he writeth,

*His like no living wight was found, nor any age did yeild,
To marshall Troopes of horse, or bands of foote in bloudy field.*

Concerning *Homer's* discipline militarie, the workes of *Stratocles*, and of *Frontine* a man of Consular dignitie in our time are to be read. ² *Ancas* perfected the Theorie thereof at large publishing many volumes of warfare, which were abridged by ³ *Cyneas* the *Thessalian*. Likewise ⁴ *Pyrrius* the *Epirote* wrote *Tacticks*, and his sonne ⁵ *Alexander*, and *Clearchus*, and *Pausanias*, and ⁶ *Euangelus*, and ⁷ *Polybius* the *Megapolitan* (a man of great learning, *Scipio's* companion) and *Eupolemus*, and ⁸ *Iphicrates*; ⁹ *Postidonius* also the *Stoick* set forth the art of warre, and many other, some in Introductions, as *Erion*, some in large *Tactick* volumes. All which, I haue being not ignorant, that it hath bene the manner of those writers for the most part, to apply their stile not to the ignorant, but to such as are already acquainted with the matters they intreat of. As for the impediments, which presented themselves to me, when I first gaue my minde to the studie of this Art, as namely neither to happen vpon sufficient Instructors, nor yet to find light, or perspicuitie enough in the precepts delivered; I will endeavour, as much as I can, to remoue out of other mens way: And as often as words shall faile to expresse my meaning, I will for plainnesse sake, vse the direction of figures, and pourtraicts, adioyning thereby the view of the eye, as an aide, and assistance, to the vnderstanding, and which all retaine the termes of auncient Authors, to the end, that whosoever shall follow this booke for an introduction, being therein exercised both to the same words; and also to the vſage of things expresse in them, may grow as it were acquainted, and imagine himselfe no stranger, when he cometh to read their workes. By which waies by me prescribed, I make no doubt, they will easily be vnderstood. Now that this Art of all other is of most vſe, may appeare by *Plato* in his booke of Lawes, where he saith: *That the Creitan Lawgiver* (so contriued his Lawes, as if men were alway prepared to fight. For all Cities haue by nature vnproclaimed warre one against another. Which being so: what discipline is more to be esteemed, or more auailable to mans life, then this of warre?

Notes.

IT seemeth by this Chapter, that the Authors, that have of ancient time written Tacticks, have bene many: and those not of such kinde of men, as have given themselves to study, and contemplation alone, but of such, as besides their knowledge in good letters, have bene actors in warre themselves; (which is more) principall actors, some of them Generalls, other the next degree to Generalls. Howbeit there is none here mentioned by Aelian, whose workes are extant. Whereby may be esteemed the inestimable losse, these latter ages have suffered, in being deprived of such excellent monuments. I hope, I may so terme them without offence, though I have not seene them. For what but excellent, can proceed from men of such excellency in their profession? such as the most part of those were. Yet for some of them I can say nothing, as finding little remembrance of them in ancient writers. Of this kind are Eupolemus, Stratocles, Hermias, Clearchus, Paulanias: albeit such names may often be found: These are specially mentioned, and much commended. Of whom I will yet say more, what I finde.

1 Frontine a man of Consular dignity I have before noted somewhat of Frontine. We have of him, as it is thought, other workes, besides his stratagemes: but this booke of Tacticks, whereof Aelian speaketh, we have not. I will only adde the relation of a Vegetius touching Frontine, who writeth thus: Cato the elder, albeit he had bene both invincible in armes, and often Generall of great Armies, beleaved yet he should more profit his Countrey, if he laid downe in writing the discipline of warre. For valiant acts are but of one mans age, but things written for the profit of the State endure for ever. Many other have done the like, but especially Frontine, whose industry herein was greatly approved by the Emperour Traian.

2 Aeneas perfected the Theory. Aeneas is mentioned by Polybius in his tenth booke, where he discourseth of signes to be made by beacons of fire, in case an enemy approacheth to any part of our Countrey. His booke was intituled, Commentaries of the office of a Generall, as Polybius saith; and Aelian here calleth them, Bookes of the office of a Generall, the title being all one in effect. Of these booke none have reached to our age, but one alone, which compriseth precepts of defending a Towne besieged, and some 5 or 6 yeares agoe came first to light, and print: that worthy man Isaac Casaubon, the learned ornament of his Countrey, (and of England so long, as he lived there) being the setter forth. And it is adioyned to his edition of Polybius. These booke Tactick of Aeneas were abridged (as Aelian saith) by

3 Cynceas the Thessalian. Plutarch in the life of Pyrrhus telleth us what Cynceas was. There was, saith he, in the Court of Pyrrhus a Thessalian, a man of great understanding: and who having heard the Orator Demosthenes, seemed alone of all, that then were esteemed eloquent, to renew in the memory of the hearers an image and shadow of the vehemencie and vigor of his vtterance. Pyrrhus held him in his Court, and made use of him, in sending him in embassages to people and Cities. In which embassages hee confirmed the saying of Euripides,

What ever force can doe, with trenchant swords;
That same, or more, is wrought by pleasing words.

Therefore was Pyrrhus wont to say, that Cynceas had gained more Cities with his eloquence, than himselfe with armes. By occasion whereof hee did him

him great honor, & employed him in his principal affaires. Tully speaketh of his workes: your letters, (saith he to Papyrius Pætus) have made me a great General: I was altogether ignorant of your so great skill in military matters. I see you have read the booke of Pyrrhus & Cynceas, I therefore purpose to follow your counsell: this yet more, to have some fewe shippes in a readinesse, vpon the sea-coast. They say, there is noe better armour against Parthian horsemen. But why sport wee? you knowe not, with what a Generall you have to doe. I have in this my government fully in practise expressed Xenophons institution of Cyrus: which before I had worne a peece with reading, Pyrrhus & Cynceas, hee nameth, as two principall Authors of warlike discipline. And where he addeth Xenophon, whose though he be not named by Aelian amongst the Tactick writers, deserves yet not to be pretermitted, having been both a great Commander, & besides writt Largely of military matters, whose workes also are now extant; let vs see, what he saith of him in another place. Cyrus, saith he, is written by Xenophon, not according to the truth of an history, but for a patterne of iust government. Whose wondrous gravity is by that Philosopher matched with singular Curtise, which bookes our Africanus, (and that not without cause) was never wont to let goe out of his hands. And of Africanus he reporteth the like in his Tusculan questiones.

4 Pyrrhus the Epriote wrote Tacticks. Pyrrhus the K. of Epirus was of ancient time esteemed one of the best Generalls, that ever was. What Anniballs judgement was of him Livy reporteth, & Plutarch in the life of Pyrrhus. And Antigonas being demanded, whom hee thought the greatest generall, then living, answered Pyrrhus. And where other Kings imitated Alexander the great in purple apparail in number of gardes about their persons, in caring the necke a litle awry, & in speaking lowde, hee alone represented him in exploides of armes, & in deedes of prowes, saith Plutarch. Plutarch saith likewise: Touching his skill in the art military howe to order a battaile, & howe to bring his men to fighte with most advantage, a man may draw prooffe sufficient out of the booke, he wrote, of which booke Tully spake in the last paragraph.

5 And his sonne Alexander. Pyrrhus had by his first wife Antigone a sonne called Ptoleme, by Laisa, another called Alexander, & by Bircanna, the third named Helenus. All which albeit by race & inclination of nature they were Martial, yet brought he them vp, & from their birth framed & enured to armes. And the report is, when upon a time one of them, yet a childe, asked him, to which of them he would leave his kingdome, to him, answered Pyrrhus, who shall have the sharpest sword: Justin also makes mention of these three sonnes. Ptoleme was borne at Sparta, Justin would have it. Plutarch saith he was slain in the way betwixt Soarta & Argos. Alexander reigned after his fathers decease, in the Realme of Epirus. That he wrote Tacticks, I have not read, but in Aelian only.

6 And Evangelus. Plutarch in discoursing of the studies of Philopomen hath this in effect. He tooke noe delight to heare all kinde of discourses, nor to reade all booke of Philosophy, but such onely, as might profit to the daylie exercise of vertue; And hee read not willingly other passages of Homer, then such, as hee thought had some efficacy to moue a mans hart to prowes. But amongst, and above all other readings, he specially affected the Tacticks of Evangelus: & like with the histories of the exploits of Alexander the great. This is all I finde of the Tacticks of Evangelus: I gesse notwithstanding, he was a choice author, because Philopomen had him in such esteem, & of whom the same Plutarch writeth: That Greece bore him singular affection, as the last vertuous man, which hee brought forth

a Cicero. epist. fam. lib. 9. epistol. 17.

b Epist. ad Qu. frat. ubi, epi. 1.

c Tullius. quest. lib. 1. cap. 1.

d Liv. deced. 4. lib. 8. c. 2.

e Plutarch. Pyrrhus.

f Pharchid. in Pyrrhus.

h Tact. lib. 1. c. 1. lib. 1. c. 1. lib. 1. c. 1.

i Tact. lib. 1. c. 1. lib. 1. c. 1. lib. 1. c. 1.

j Tact. lib. 1. c. 1. lib. 1. c. 1. lib. 1. c. 1.

k Tact. lib. 1. c. 1. lib. 1. c. 1. lib. 1. c. 1.

l Tact. lib. 1. c. 1. lib. 1. c. 1. lib. 1. c. 1.

m Tact. lib. 1. c. 1. lib. 1. c. 1. lib. 1. c. 1.

n Tact. lib. 1. c. 1. lib. 1. c. 1. lib. 1. c. 1.

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q Tact. lib. 1. c. 1. lib. 1. c. 1. lib. 1. c. 1.

fourth in her old age, after so many great, and renowned Captaines of ancient time; and always augmented his power, and authority, as his glory increased. In which respect a Roman, praising him, called him the last Græcian; meaning that after him Greeke bred noe great, nor any personage in deed worthy of her.

7 And Polybius. It is the same Polybius, whose History, so much as is extant, that excellent learned man Isaac Casaubon translated into Latin, and set forth 1609. For his life and worth refer to the preface of the same Casaubon to Polybius his history. Hee had bene in Asia, his owne country, Generall of the horse. Afterward being in displeasure with the Romans, hee lived long in prison at Rome: and was for his warlike finally released by intercession of the greatest men of Rome: and became companion to Scipio Africanus the younger, with whom also hee was at the siege and destruction of Carthage. His Tactics, whereof Ælian speaks, be, perished with other of his works. Yet are there many passages dispersed here, and there in his history, which argue his extraordinary skill in matters of warre. And it may seeme, that Ælian hath taken much from him both for matter, and words.

8 Iphicrates] Whose will read of Iphicrates, let him goe to ^a Emilius Probæ, that writeth his life. His actes are also declared by Xenophon, and Diodorus Siculus, and Polyæn, and Iustin and divers others, as they were incident to their generall histories. Hee was esteemed one of the best Generalls of his time: and was called out by name by Darius King of Persia to be generall of the Græcians, his mercenaries, in the warre, hee had against the Egyptians: His fame and estimation was soe great with Alexander the great, that when his sonne (whose name was also Iphicrates) with other Græcians were taken prisoners by him, for that they came embassadours into Persia to Darius, hee not onely spared him for the love of the City of Athens, and for the remembrance of his fathers glory (^b the wordes of Arrian) but held him about him in honour so long, as hee lived, and after his decesse sent his reliques to Athens, there to be interred by his friends, and kinsfolke.

9 Polidonius the Stoick] Polidonius in his time was a Philosopher of high renowne, and of the sect, that were called Stoicks. Tully citeth him often in his works. In the second booke of Tusculan questions hee recounteth, ^c that Pompey the great, on a time comming to Rhodes, was desirous to heare him. But understanding hee was extreame sick of the goutte, hee forbore not notwithstanding to visit him being a most noble philosopher: whome after hee had seene, and saluted, and vsed with honorable wordes, and told him, hee was fory, hee could noe suffer paine to be cause, that so great a man seeked mee in vaine. Then, as hee lay in his bed, began hee gravely, and copiously, to dispute, that nothing was good, but that, which was honest. And when firebrands, as it were, of torment towched him to the quick amidst his disputation, hee broke forth often into these wordes: Sorow, all this is nothing. Though thou thourest me never so much, I will not yett confesse, that thou art of thy self euill. So Tully. ^d Pliny likewise telleth, that Pompey, after the warre of Mithridates, going into the howle of Polidonius, a man famous in Philosophy, forbid his seruant to knock at the doore (as the manner was), and the seruantes bundles of roddees (saith hee) were submitted to a doore by him, to whom East & West had submitted themselves. The same ^e Tully attributeth to this Polidonius the invention of a Sphere, whose particular conuersions did worke the same in sonne & moone, and the other fixe planets, that is wrought by the motion of heauen euery day and night.

^a Emilius Probæ in vita Iphicratis. Xenoph. histor. greculib. 9. 28. 15. Diod. sicul lib. 15. 479. Polyæn. lib. 2. in Iphicrate. Iustin lib. 6. c. 11. 46.

^b Arrian. lib. 2. 41. c.

^c Tullius. de officiis lib. 2. 146.

^d Plin. natural. hist. lib. 7. cap. 10. pag. 415.

^e Cicero de natura deorum lib. 2. 87.

The preparation of warlike forces and division of them, and how they are armed.

CHAP. II.

I will then beginne with such preparations as are absolutely necessary for service in warre, the forces whereof are of two sortes, the one Land forces, the other ship forces. Land forces are such, as fight on land: Ship forces such, as are ordered for fight in shippes vpon Sea, or Rivers. But the order of Sea service I will reserve for another place, and intreat now of things pertaining to Land service. The levies then for Land service are either of those, that fight, and mannage Armes, or else of those that fight not, but remaine in the campe for necessary vses. They fight that stand ordered in battaile, and with armes [allaille or] repulse the enemy. The rest fight not, as Phisicians, merchants, seruants, and other, which follow the campe to minister vnto it. Such as fight, are either footemen, or Riders: footemen properly, that serue on foote. Of Riders, some vie Horses some Elephants. They that vie Horses, are caryed either one Horse-back, or else in Chariots. And these are the differences in generall. But in speciall the foote, and Horse receaue many other divisions; onely the Elephants, and Chariots, neuer varie. Footemen then are reparted into three kindes, one being Armed, another Targetiers, the third light, or naked. The Armed beare the heaviest furniture of all footemen, viting according to the Macedonian manner large, round, Targets, and a longe Pike: The Light contrarywise beare the lightest, having neither Curace, nor Greue, nor longe, or round Targett of any weight, but a fliong weapons onelies ^a Arrowes, ^b Darts, ^c Stones either for hand, or sling. To this kind is referred the ^d armour of the Argilos, who hath his furniture like to the Macedonian, but some thing lighter. For hee carrieth ^e a little flight Targett, ^f and his Pike is much shorter, then the Macedonian Pike: which manner of arming seemeth a meane betwixt the light, or naked, and that which is properlie called heauie: as being lighter, then the heauie, and heavier, then the light: and that is the cause, that many place it amongst the light.

The forces of Horse (which were distinguished before from Chariots) as being ordered in Troopes, are either ^g Cataphracts, or not Cataphracts. They are Cataphracts, that cover their owne, and their horses bodies all over with armour. Of not Cataphracts, some are Lauancers, some Acrobolists, ^h Lauancers are such as ioyned with the enemy, and fight hand to hand with the Lauance on horseback. Of these, some beare longe Targets, and are therevpon called Targetiers: Other some Lauances alone without Targets, who are properlie called ⁱ Lauancers, and of some Xestophori. ^j Acrobolists on horseback are such as fight a far of with fliong weapons. Of these, some vie darts, some bowes. They vie darts, whome wee call ^k Tarentines. Of Tarentines, there are two sortes; for some throw little ^l darts a farr off, and are termed Darters on horseback, but properlie Tarentines. others vie light darts, & ^m after they haue spent one, or two, close presently with the enemy like the Lauancers, which

wee spake of, and fight hand to hand. These in common speech are named light horsemen. So that of *Tarentines* some are properly called *Tarentines*, whose manner is to dart a far. Some light horsemen, who joyne, and fight hand to hand. ^a The horsemen that vie bowes are termed *Archers on Horseback*, and of some *Syrians*.

Theſe then are the differences of such as are in the Campe, the kinds of Souldiers being in number nyne: Of footmen, armed, *Targetiers*, *Light armed*, or *naked*: Of horsemen *Lancers*, *Darters*, *Archers*, *Cataphracts*: And lastlie *Chariots*, and *Elephants*.

Notes.

IN this Chapter the kinds of Souldiers are distinguished according to their severall armes borne in fight. And therefore of foote some are called armed, because they beare heavy armes; other light armed or naked, because they wear no defensive armes, other some Targetiers, because their chief defence rested in a light target, wherewith they covered their bodies. The horse also have their appellation, as their armes are. And some are Cataphracts, because themselves & horses were armed completely, other Lancers, for that they used a lance: other some Archolists, by reason they fought with stinging weapons a furre. The first thoughts of a Prince, or State, that is resolved to put an army into the field, ought to be to provide armes. Armes are the security of their own souldiers, the terror of the enemy, the assured ordinary meane of victory. The antiquity of armes is all one with the beginning of warre. For when of ancient time mighty men puffed up with pride, and led by ambition, sought by violence to enlarge their empire, and to bring under subjection their bordering neighbours, they were enforced to flye to the invention of armes, without which no victory could be obtained. Since, armes have been taken up for defence also, necessity, the mother of artes, inventing a meane to withstand ambition. As Antalcidas was mollified of Agesilaus being wounded by the Thebans; you are well rewarded for your labour, quoth hee, since you would needes teache the Thebans to fight, that had neither will, nor skill so to doe. For the Thebans being put to necessity of defence grewe warlike through many invasions of the Lacedemonians.

^a Pline. lib. 7. c. 26.
^b Veget. lib. 2. c. 1.
^c Pline. lib. 7. c. 26.

^d Pline. lib. 7. c. 26.
^e Pline. lib. 7. c. 26.

^a Plutarch. Whoe were the inventors of the severall pieces of armour, and of the divers kinds of weapons used in old tyme, may appeare by the relation of Pline in his natural history. This is a crye, that the most warlike nations, and most victorious have alwayes sought to have advantage of their enemies by advantage of armes. The end of armes is either to defend, or assault. Hence are armes divided into two kinds: Defensive, and Offensive. Defensive are those, which are worne to resist the force, and charge of the enemy. Of this sort are the head-piece, gorget, curace, vambrace, gauntlets, tases, greaves, and target. For whereas there are severall partes in man, the wounds of any of which bring with them donbted death (as some authors write) the braines, the two temples, the throate, the breast, the belly, the two mufcles about the two elbowes, the other two about the knees, & the privy members pierced with a thrust: the head-piece for weth for the defence of the braine, and temples, the gorget for the throate, the curace for the breast, the vambrace for the mufcles of the armes, the tases for the privities & belly, the greaves for the mufcles about the knees, and the target for further assurance of the whole body, being moucable against all strokes, and proofe of the assaults. Offensive armes are such, as men endeavour to wound, or kill withall: as stinging weapons of all kinds, arrows, stones out of slings, or the hand sword,

sword, spikes, partizans, javelines, and the like. ^a But as defence, and security of a mans self is more agreeable to nature, then to hurt an enemy, so are the defensive armes preferred before the offensive, in that they bring safety to him, that beareth them, whereas the other are employed in annuering the enemy onely. The Poets sett forth their bravest and valiantest men alwayes best armed for defence. So Achilles in Homer, and Aeneas in Virgil, are armed to point with armes wrought by Vulcan, to the end to remaine untouched amidst the stormes of their enemies weapons. The Gracian Lawgivers unjust that souldier, that in fight cast away his target: not him, that lost his sword or pike. ^b Plutarch writeth, that at such time as Epaminondas assaulted Sparta (the most warlike City of Greece) there was in the City a Spartan named Isadas, who was the sonne of Pheidias, hee that surpris'd the Castle of Thebes called Cadmea, and thereby stirred up the warre betwixt the Thebans, and Lacedemonians, & ruinated the principality of the Lacedemonians in Greece. This man being in the flower of his age, and personable, and large of lymmes, ranne forth of his house all naked, & a javelin in the other, and breaking through the throng of those, that fought on his side, came to handes with the enemy, and overthrowing some, except a sword in one hand, & a javelin in the other, and breaking through the throng of those, that fought on his side, came to fight, till the enemy was repuls'd, and at last returned into the City without wound. The chief magistrate understanding hereof rewarded him with a Crowne for his valor, but yet fined him at a hundred drachmes, for that he durst vnto fight without armes defensive, judging it a matter almost impossible, that a naked man should escape with life fighting against the armed handes of so many valiant enemies, as the Thebans were.

^c Veget. lib. 2. c. 1.
^d Pline. lib. 7. c. 26.
^e Pline. lib. 7. c. 26.

In armes was required, that they should be strong, that they should be fitt, that they should be comely; strong to protect, or annoy, fitt to stie close to the body and be manageable, comely to grace him, that beareth him. That defensive armes ought to be strong, may be shewed by the end of armes; which is to save harmlesse against arrows, darts, and other offensive armes of the enemy. If thy saile of this end, they are of noe use; it being better to be unarmed, then carry armes, that will not defend. Without armes you have the body free, and at liberty: carrying armes, though never so light, they must be a cumber to you, and some what hinder the motion of your body. Armes therefore ought to be sufficient to resist the weapons of the enemy. The inconvenience of defective and weak armes is well noted by Vegetius. From the building of the City of Rome, saith hee, till the time of the Emperour Gracian, the foote armed their bodies with Cataphracts, and head-pieces. But when field exercise through negligence and sloth was given over, armour began to grow heavy, because it was fildome put on. They made suite therefore to the Emperour first, that they might leaue of their Cataphracts, then, their headpieces. So our souldiers encountering with the Gothes, were oftentimes wholly defeated and slaine by the multitude of their arrowes. And a little after: so cometh it to passe, saith he, that they, whose without armes, are exposed in the battaile to woundes, thinke not so much of fight, as of running away. Yet must wee not imagine, that those souldiers fought in their ordinary apparell onely: I encline rather to the opinion of Stewechius, whose holdeth, that they tooke themselves to their military coates, called in Notitia vtrique, Thoracomachi: and to their Targets; This Thoracomachus is a garment invented long before Gracians time, and worne under the armours of the souldiers, and was a kind of felt, but being neere against arrowes, and three targets not sufficient to cover their heads, & whole bodies. From arrowes, they were of noxious to the shoote of the Gothes, and receyved those overthrowes, Vegetius speaketh of.

^f Veget. lib. 2. c. 1.
^g Pline. lib. 7. c. 26.
^h Pline. lib. 7. c. 26.

ⁱ Stewechius
^j Veget. lib. 2. c. 1.
^k Notitia vtrique
^l Veget. lib. 2. c. 1.

The manner whereof strong armes were made, I find to bee divers. Some were forged of Steele, as the armour of Goliath, and the head-piece of K. Saul. For it is not thus fitt to doe one, what his curace was of, notwithstanding it is likely, as it was of the same matter, of which his head-piece was made. While I say these armours were of Steele, I follow therein the judgement of Tremellius and Junius, whose so translate it; & with them also agreech P. a. tabas. For the old translation hath, that they were of brasse. I have not elsewhere read of Steele armour. And it may bee, that the old translation had an eye upon the sige of ancient times, wherein the matter of armes was principally of Braille. Homer reporteth, that the armour of Diomedes was of brasse; & Pausanias, that all the Hæcetes (that is the ancient worthies about the time of the siege of Troy) had their armour of Braille. Alcæus the Poet in describing his armory saith, the rest of his armors were of brasse, as his head-pieces, his greaves, his Targets, only his Cuiraces were of linnen. Pausanias reporteth also that the sword of Menon was of brasse, & the head of the spear of Achilles, & Pindarus saith, & the head of Meriones his shaft. Servius Tullius in setting the City of Rome, appointed the chiefeft & richest Citizens to arme themselves with headpieces, greaves, Curace, & buckler also of brasse. The targets of the Lacedæmonians were of brasse also by the institution of Lycurgus. So that brasse was much used in armes in the oldest times. And where Alcæus speaketh of his linnen Curace, I find that Curaces of linnen were in request also even in those times. Homer affirmeth that Ajax Oileus had a linnen Curace. But afterward I philosophizes the Athenian he d. them so good, that he gave them to his souldiers to wear, in steede of their usuall armes made of iron, & brasse. And Xenophon armeth Abradates the King of Susse with a linnen armour, adding that it was the manner of that Country. And Plutarch saith, that Alex. the great, after he had gotten the victory against Darius in Cilicia, found amongst the spoile a linn armour, which he afterward used in the battailes, he fought. Patricius is so confident in the strength of a linnen armour of his owne device, that he doubteth not to preferre it before well tempered iron. What his invention is, he keepeth to himself, for feare the Turk should have intelligence of it, & so Christianity bee driven to an exigent. Almen knoweth, that the temper of an iron armour may be such, as will resist the violence of a musket shot, and that at a neere distance. Neither is this temper the invention of our dayes. The like hath been of ancient times. Plutarch writeth, that Demetrius besieging Rhodes, was presented with two iron armours brought out of Cyprus, either of the weight of 40 pounds. The maker of them, whose name was Zeulus, desirous to heave their strength, & firmness caused one to be set up at the distance of 26. paces, and bee shot at with an arrow he discharged out of a Catapult. The armour hute remained unpierced, nothing appearing upon it but the raising of it were of a pike. And that a Catapult is of more violence, the musket shot, the shot thereof declared in history make plaine. Whether a linnen coat be of that resistance, or not, hath not been yet tried. Nay the contrary hath been tried. For Alexander at a siege of a City of the Malians (as I take it) was fore wounded with an Indian arrow through an armour of linnen. Whose armour I would judge to have bene not of the strongest, & weakest, but of the furshest kinde. Yet it is not to bee passed over that in Lipsius alleageing out of Nicetas Choniates concerning a linnen armour of Conradus of Alenofa Curace hee had on a woven weed made of flaxe, soaked in sower wine, well fitted, and often-folded. It was so sure against outward force of strokes, being soaked with wine, & salte, that it could not bee pierced with iron or Steele. This invention our age hath not bene acquainted with; Whether it bee the same, that Patricius armeth as, for experience sake. That antiquity practised it in wood, Pliny witnesseth, who Writing of wood and woollen garments saith: "Of wood wrought and pressed together by it selfe alone

alone (I think as our hatters worke felt) a garment is made; & if you worke it with vinegar, it cannot bee strooke through with a sword. This wood I wrought, he calleth coactam: which in Caesar, as I take it, is called Subcoactum, Caesars wordes sound thus: "Pompey, although hee had noe purpose to hinder Caesarus workes with his whole army, nor yet to hazard battaile, sent notwithstanding archers and flingers, of whom hee had great store, to convenient places; and by them many of our souldiers were wounded, & a generall feare of arrowes fell upon them, and well nigh our whole campe made themselves coates and casses of either felts (subcoactis) or quilts, or leather, thereby to avoide the daunger of flying weapons. But we will leave Patricius to his fancy, and adde an example out of Xenophon of armors used by the Chalybes, a nation inhabiting the Chaldaean Mountains. The Chalybes, saith hee, were the most valiant nation, that the Grecians passed through, & such as durst come to handes with them. They used linnen Curaces reaching downe to their bellies, and in steede of wings, they had roapes thick woold, and fastened together. The strength of roapes thick woold together must, noe question; bee great. Caesar confirmeth it. Emongest other defences, which his souldiers desired for assurance of a Turret against the Engines of the Artillians, hee saith: "They made fourte foories of Cables fitting the length of the walles of the Turret, and fourte foorie broad, and fastened them hanging downward to the beames sticking out of the Turret on those three parts, which lay toward the enemy, which kinde of covering alone, they had in other places made triall, could bee forced or broken through by noe misfue weapon, or Engine whatsoever. Thus, I have beard, was the device of the Spaniards in 88. to defend their ships against the fury of four artillery. Whereof I may inferre, that if Cables combined together bee of such assurance against Engines, roapes thick layde and fastened together must bee a strong defence against a sword. To end with the matter, whereof armes were made, I find: likewise, that the Attacrones used, in steede of Curaces, coates made of haire. And thus much of the matter of Armes.

Besides, armes should be fitt for the body, and for the strength of him, that beares them. When David was to fight against Goliath, K. Saul, seeing him without armour, caused his owne head-piece & curace to be put upon him. David stayed to marke, but finding these armes to heavy, was faine to leave them, and to goe against Goliath unarmed. Saul was the tallest man of his nation, David but meane of stature, & to put armour proportioned to a large body upon him, that is a great way lesse of members, it is as much, as to deliver him bound to his enemy. Xenophon emongest other causes, why the Lacedæmonian horse were beaten by the Thebans at the Leuctra battaile, alleageath thus for a maine cause. That the richest men kept & furnished out horses, & as often as musters were takē, the man, that was to serve, shewed himself, & answered to his name. & receiving horse & armes, such as were given him, was so led against the enemy. They were beaten, saith Xenophon, receiving horse & armes at all adventure, not knowing, whether they were fitt for service, or not. Whether armes be to bigge or to litle, they hurt a litle. To litle, they pinche the bearer, & make him not able to endure labour; because he is in paine. To great, by their flap and loose hanging about the body, they hinder the motion of those partes, that are to be employed in fight. Being fitt, they differ litle from ordinary apparell, except it be in weight. Which inconvenience is easily remedied by use and practise. Tully writeth of the Roman souldier, that his continuall use of armes was such, that hee noe more reconed his target, sword, head-piece, & other armes to bee burdensome unto him, than his shoulders, armes, & hāds: & said that armes were

e Phi in Philon.
Polyb li 11, c. 29.

the meaning of the Oracle was not of Cocks, but of men, that wearing some ornament on their heads, had a resemblance of Cocks, waged a multitude of Carians against Teme-thes, by whose help he overthrew Temethes in battaile, & possessed himself of the crown of Egypt. Now for the true end of souldiers ornaments I will onely adde one example. Philopomen the Achaean in reforming the abuses crept into the Achaean State with great judgement (I will use the wordes of Plutarch,) reduced to order their delicacies & superfluities. It was not possible quite to take away the sicknesse of vain & idle desires, wherewith they had of long time been possessed, delighting in excess of appaile, in riche dyes of coverlets, & carpets, striving one with another, who should be most sumptuous in bankets & feasting. But by litle & litle beginning to turne their thoughts from vnnecessary expences to a love of comeliness in thinges, that were profitable & honest, he brought them at last to leaue the expences of the body, & to shew themselves gallant, & braue, in soldierly, & warlike furniture. A man might therefore haue seene the shoppes full of silver and golden cuppes cutte a peeces, of curaces gilded with gold, of silvered targets, and bittes, the places of exercise fraught with colts then first backed for service, & with yong gallants managing their armes, & in the hands of women head-pieces adorned with divers coloured trymmings, hortemens coates, and souldiers cloakes curiously embellished with flowers. For the very sight of these things both encreaseth spirit, & stirreth up desire, & engendreth an vndaunted boldnesse, and alacrity to daungers. In other shewes to much lavishing bringeth in effeminate-nesse, & worketh a remissenesse of minde, the fence with vaine pleatings and ticklings subverting, as it were, the vigor and force of the vnderstanding. But in these the Spirits are much heightened, and exalted. As Homer bringeth in Achilles at the very sight of his newe armour ravished and inflamed with a desire to bee doing with it. Thus garnishing the youth hee exercised & hardened them to labour and warlike motions, making them thereby to vndergoe with desire whatsoever they were commaunded. So farre Plutarch. Out of whose opinion it followeth, that Bravery of armes raiseth the spirits, stirreth up desire to fight, maketh the souldier bold, and cherefull to perills, and as Polybius holdeth please the sight, encrease the stature in shewe, and is a terror to the enemy. Yet ought there therein a meane to be sought, & rather an assurance followed, then vaine gazing and ostentation. Antiochus being to fight with the Romans gathered a mighty army together. And seeing them glitter with gold and silver, and with all excess of bravery, as the manner of the Asiaticall people was, tooke so great delight therein himself, that calling Anniball unto him, hee shewed his troopes, and demanded, if hee thought not that Army sufficient for the Romans: yes quoth Anniball, though they were the most covetous people in the world. Anniball with good reason derided the vaine shewe fitter for a malle, then a shield which hee had seen in the hands of the

maniflowers, and caused long heavy targets to bee framed, and choise horses, rather than were already managed, and made fitte for service, then those that were richly trapp'd and garnished. So farre Plutarch. The souldiers care there for: to be first for surenesse, then for sinnesse, lastly for comeliness and ornament in armes. If the two first fail, the last will be a burden, and will proue rather a burden, then a defence. And thus much of armes in generall: Nowe followe the particulars of armes, as they are in Alian.

I Preparations absolutely necessary for warre] The preparations, wherof Alian speaketh, are so necessary, that without them no warre can be made or continued. For purposing to fight by water you must haue shippes, by land, you must haue foote, and horse. For which, if you provide noe armes, you put them into the field not to fight, but to bee slaughter'd. The manner of fight in the field is not of one sort. Some time celerity is needfull, to attempt or prevent the enemy: sometime a slowe and sure proceeding, left with too much hast, wee be overtaken ourselves. Therefore the divers arming of souldiers, ought to be such, that they may sue for all occasions, and uses, and that wee may employ alwayes to service such, as by reason of their armour, shall most fitte our purpose. Wherefore^a Iphicrates firstly resembled an army to a mans body: calling the heavy-armed the body, the light-armed the hands, the horse the feete, and the Generall the head: and as, if any of the rest were wanting, the army should bee lame, and halted, so if there want a Generall, it is unprofitable, and of noe use. The heavy armed are the body, which giue life and foode, as it were, to the rest, and to which the rest being directed, retire. The light-armed are the hands, which vpon euery occasion being put out to grpe and take hold vpon the enemy, are drawn in againe, when it is expedient. The horse, as feet, moue with celerity: the Generall is the head, that ruleth, that watcheth, that careth for the rest, directing the times of their motion, and of their rest. So then the whole force of the field consisteth of horse, and foote. And the foote are reparted into three kinds.

I Armed, Targetiers and light-armed] These fewrall kinds of souldiers were used by all the Grecians, especially by the^b Athenians, Lacedamonians, and Thebans, who were the mightiest, and the most warlike people of Greece. Alexander had them in his army against Darius. When Alexander, saith Arrian, came to the place, where Carius (with whom Xenophon was) encamped, and sawe the streights of Cilicia possessed with a strong garrd, hee left Parmenio with the heavy-armed, to stay behind, himselfe about the first watch taking with him the Hypaspistes, archiers and Agrians, marched on toward the streights in the night. The armed were left with Parmenion, himselfe took with him the Hypaspistes (targetiers) archiers, and Agrians: These Agrians were darters on foote. The like is to be found in divers other places of Arrian. Pyrrhus also, that followed the Macedonian maner in arming his souldiers, had the same division of armes. And Philip King of

a Plutarch in Pe-
loida Po ven l
in Iphicr § 22
lco 22, 50 § 12

b Thered. lib. 4
315. B. C.

c Arrian li. 3, c. 22.

d Arrian li. 1, 14

e Plutarch in
Pyrrho
lco 22, 50 § 12

because it is some what resembleth the Curaces of our time, I will reherse the description out of Pausanias. There lay vpon the aulicr, *saith hee*, a brazen Curace, the forme whereof agreeth not with the vse of our times, but of old it was common. It had two plates of brasse, one fitte for the brest and the belly, the other to cover the backe. That before was called *gyalon* (the hollow part) that behynd *Prosegon* (because it was added to the other.) They were fastened together with buttons behinde. It seemeth to bee a sufficient defence for a mans body without a Target, Therefore Homer maketh Phorcys the Phrygian to fight without a target, because he wore such a Curace. But yet, that it was not the manner of the Macedonian armed to beare pike & target alone, may be plaine many wayes. First d Polen giueth them headpieces, & greues, and targets, and pikes. Then doubt I not but they were as well armed as the rest of the Grecians, within whose Panoplia Curaces were compr. bend. d as S. Paule testifieth, reckoning as parcels of the Panoplia a Curace, a target, & a headpiece. Now that the Macedonians had also their Panoplia full or complete arming is to be found in^e Diod. Siculus. Where also Choragus the Macedonian (whom Q. Curtius calleth Horatas) is said in the fight betwixt him & Dioxippus to be fully armed. Le describe the Panoplia of the Macedonians after this manner. Alexander, *saith hee*, armed his Macedonians with a large target, a sword, a head-piece, greues, vambraces, and a long pike. Philopomen (as is before reherfed) reducing his Achaean to the Macedonian arming, bringeth them to Curaces, headpieces & greues. The names also that are attributed to the Armed, shew they were otherwise armed. Plutarch calleth them *Pepragmenos*, & *Cataphractus* as having their bodies all armed & opposeth them to *Fucioni* lieth or naked: And by Vegetius, the armour is self is named *Cataphracta*, because the whole body is covered there with. Xenophon termeth them *Thoracophoros* bea- ring Curaces.) These are the strength of the battaile, and a strong wall, or rather a fortresse of the field, to whom the light-armed, and the horse also retire in time of need. As long as they stand, the field is not lost; being defeated, the rest can make noe resistance. Being armed with a single target without other armes, they incur the same daunger, that the Romans in Graians time did, whose for want of Curaces were entirely destroyed with the arrows of the Gothes. Wherefore, it seemeth, Alian heer pointeth at the principall armes onely of the armed Macedonian, For after ward discoursing of the light-armed, he *saith*, they neither had Curace, nor greue, nor long or round target: implieng thereby, that the armed had them all. So Livy, comparing the armes of the Romans and Macedonians together, *saith* noe more, then, that the Macedonians were armed with a round target and a pike, the Romans with a long target, and a darre, called *Pilum*; when himself had before declared, they had headpieces, Curaces, and greues.

3 Vling targets after the Macedonian manner Targets were of two sortes, round targets, and long targets. Long targets were called *Thureo*, and were in forme like a doore, from whence they had their name. These were of the same sort as the

been able to haue borne them for the weight. I deny not, that in ancient time some targets were plated with brasse: the rather, because I find, that Alexander to match the Indians pomoe covered the targets of his souldiers with plates of silver. But, that the ordinary Macedonian target was so covered, I deny. Alian after calleth them *chalice* (brazen) not epichalce (covered with brasse.) Polyb. *saith*, that the Macedonians in the time of K. Philip the sonne of Demetrius were called *Chalcaspides* (Brazen targetiers) not epichalkitai, by which name, as Hefychius hath, they were called, that had their targets covered with brasse. So likewise in the time of Persus. And the Megapoliens, who imitated the Macedonian manner of arming, are termed *Chalcaspides* in Polybias: I haue shewed that the Lacedemonians had brazen targets by the institution of Lcrgurus: that, in the time of the Heroes almost all armour was made of brasse. The targets of the Lacedemonians that were slaine at the battaile of Leuctra were brasse, and to be scene in the time of Pausanias; and the brazen target of Pyrrhus, which he left at Argos being there slaine, was kept in the temple of Ceres. As for the weight, it is not so great but it may become light enough by vse, and exercise. Wee see iron targets in vse at this day, and not hard to be borne. And albeit the weight bee not for euery mans strength, yet since it hath bene, and is, the manner to make choice of souldiers, and to fitteth them with armes according to the ability of their bodies, I see noe reason, but the stronger sort might well beare them. Another sort of targets there was which differed from the Macedonian not so much in forme of roundnesse, as in matter, and manner of carieng. They were made of wicker, and borne in the left hand as our bucklers, which wee used not long since, and some covered over with hides some not. Xenophon *saith*, that Cyrus the elder armed the Persians with these wicker targets: & reho- nizing up the nations, through whose Countreies the Grecians passed in their returne out of Persia, & describing their armes, reporteth that the Chalybes, *Turchi*, & Phasians had targets of this kinde. Now, that they were borne in the left hand is clear by the same Xenoph. He writeth thus of the fight betwixt Cyrus & Croesus: The Egyptians & Persians encountering together, the fight was hard & sharpe: & the Egyptians aswel in number as in armes, had the advantage. For they fought with stiffe, long pikes, & their large targets better covered their bodies, then Curaces, or wicker targets, and being borne on their shoulders availed to joint thrusting forward. Seeing therefore their targets close, they aduanced, & ranne on. The Persians were not able to endure the shock, by reason they bore their wicker targets at the armes end, but retiring by litle, & litle, & giving, & taking blowes, they maintained the fight till they came to the Engins. So farre Xenophon. Out of which words a man may plainly vnderstand the manner of beauring these wicker targets, which by reason of lightnesse might easily bee held out at armes end. And as the Egyptian target, which reached downe to the foote, must needs bee heavy, and therefore had need of the shoulder to support it, so was it with the brazen targets of the Macedonians, which were likewise borne of the same sort, but of a different matter. These therefore

Porpax in the same fence, making it the thing bearing vp the target into which the hand and arme to the elbow is thrust. ^d Suidas saith, Porpax is it, that they hold the target by; which is called ochanes: & againe, that some take it for the band of the target; other some for the middell iron that goeth through the target, on which the fouldier taketh hold. So that both Hesychius, & Suidas agree, that Ochanon & Porpax are sometime alone, and signify the handle of the Target. In ^e Herodotus li. ii. which fence ^f Herodotus & ^g Pausanias take Ochanon also. Hesychius further interpreteth it for the band of the target. ^h Which signification better agreeth with the meaning of Plutarch, who maketh an apparant difference betwixt the, reporting that Cleomenes taught the Lacedemonians to cary their targets, by the Ochane, not by the Porpax. When he saith by the Ochane, hee meaneth by the strappe, by which, being fastened about the necke, the target is throwne over to the back, & resteth vpon the left shoulder. That, which I say, will better appeare, if we marke, what the Lacedemonians did before, & what Cleomenes aduise-
^g Plutarch in vi. Cleomenes
 seth them vnto. Before they caried a speare in the right hand, and a target by the handle in the left, so that both their hands were full. The speare was not able to match the enemies pike (for Cleomenes had often to doe with the Macedonian: & Achaeans, whose both vsed pikes) & pikes, the Lacedemonians could not wield with one hand: So then, to giue them liberty of both hands, he c: vnfastned the to cary their targets at their backs by the strappe or Ochane (which was the Macedonian manner) and not to hold them any more by the Porpax or handle; and so to free their left hand, to apply both to the meneing of a pike. This I take to be the direct meaning of Plutarch: Cleomenes then perswaded them to leaue their speares, & take pikes. And lest the target in the left hand might proue an impediment to the vse of a pike, hee thought best they should cary them at their backs by the Ochane. To cary them then by the strappe at the backe is to giue free vse to the left hand, without which a pike, specially a long pike, such as Cleomenes aduised them vnto, cannot be wielded: as experience will teache any man, that list to make triall.

4 And long pikes.] Pikes for the most parte haue beene called by two names by the Gracians; Doru, and Sariffa. ^h Alian nameth them Dorata both heere, and in other places of this book. ⁱ Xenophon, speaking of the weapons of the Chalybes, saith they had Dorata of s. cubits long; armed with iron at one end onely. Yet is Doru taken for a speare oftentimes, as in that place of ^k Plutarch last recited where Cleomenes perswaded the Lacedemonians to change their Dorata (speares) into Sariffas (pikes.) The like recounteth hee of ^l Philopamen, who changed the speares of the Achaeans into pikes, calling the speares, Dorata, the pikes, Sariffas. And even in this place Alian termeth them not Dorata simply, but with addition of Perimekestera, of a long staffe. And after describing the armes of the Peltaestes hee saith their speares (Dorata) were much shorter then the pikes (Sariffas) of the armed. Properly the pike of the Macedonian is termed Sariffa: if sometime Doru, from the Dorians, who first used it.

of Arrian who turneth Xystois Crancinois into Corniel daries, whereit should be Corniel lances. For in that place Alexander is reported to haue fought with a lance, and to haue broken it in fight, and to haue asked another of Arctes, one of the Quiries of his stable, whoe had also broke his, and fought with the truncheon, and to haue taken the lance of Diuantes the Corinthian, and returned presently to the fight, and therewith overthrowne Antibradates the sonne in lawe of Darius. Besides it is said, that the Macedonians had the advantage in weapons; Take it thus, that they fought with daries against Iavelins, what advantage had they especially being come to the shock: Daries are vsed a farse of. At hand noe man fighteth with them, vnlesse hee haue noe other weapon. I thinke noe man will deny, but that a Iavelin in closing is more advantagious then a darte. And that Xyston signifieth a lance. Alian himselfe testifieth in this Chapter calling the lancers Doratophori, or Xystophori. The Macedonian then had his horsemans staffe of Corniel. Which ^m Pliny affirmeth to be a sound and a fast wood. If his lance: a man may probably conceiue, his pike also, which exceeded the lance in length and thickenesse onely. Wee at this day preferre the Ashe before all woodes for toughnesse, lightnesse and beautie; especially if the vaine runne through to the end. Notwithstanding I finde in Cicero a knight of Venice, an old fouldier, and one that followed the Emperour Charles the fift in his warres of Africk, that the opinion of his time enclined rather to Fure, both for lightnesse, and strength. I haue not scene the experience: therefore leaue I the iudgement to triall. Wee haue then out of Alian that the armed, had both target and pike, that one man should at one time vse both target, and pike in fight, against the enemy will seeme incredible in our dayes. Yet vsed the Macedonian soldiers both; at one instant they both charged their pikes, and covered themselves with their targets against the flying weapons of the enemy. The manner was this: when they closed with the enemy, they charged their pikes with both hands, and with a slight wryeng of the body, and lifting vp the right shoulder, whirled their target, hanging at their backe, vpon the left shoulder, that stood next the enemy in the charge: and so covered all their body to the middle, and beneath. I haue touched it in the practise of Cleomenes. It appeareth more plainly in Plutarch, describing the battaile betwixt K. Persius, and the Consul Amilius, Hee hath this: ⁿ The enemy approaching Amilius issued out of his Campe, and fownd the legionary Macedonians, bearing nowe the heades of their pikes stiffe vpon the targets of the Romans, not suffering them to come vp to the sword: which when hee sawe, and sawe with all the other Macedonians casting about their targets from behinde their shoulders, and receiving the Roman targetiers with their pikes abased together at one signal, and likewise the firmenesse of the battaile shutte vp, & ferred, & the roughnesse of the front (the pikes lyeng out before) he became aftonied, & af-
^o Plutarch in Amilius.
^p Pliny name: luttuli 16 cap. 40.
^q Cicero, Cicuta de disciplina mil. lib. 2. 111.

6 Flying weapons onely] The light-armed are divided into three kinds, Archers, Darters, and Slingers. Which three kinds were of much use amongst the Gracians, and they beare onely flying weapons. Xenophon testifieth that Cyrus the elder had them: And the Gracians in their returne out of Persia: Alexander had them in his warre against Darius: and Pyrrhus in his warre in Italy, Sicill and Greece: The Gracians against Brennus King of the Gaules: Both the Athenians, & Thebans at the battaile of Delos.

7 Arrowes] Archers haue alwayes bene of speciall esteeme for the field, and preferred before the other kinds of light-armed. Many nations haue bene commended for their skill in shooting. Emongst the Gracians the Cretans were (of ancient time) sole archers, as Pausanias witnesseth. Yet was not their service aqual with the service of the Persians. For Xenophon confesseth, that the Persian bowe overreached the Cretan a great way: and that the Rhodians with their sling ownt throw the Cretan bow. Of the Cardichans a people, through whose Countrey the Gracians passed at their returne out of Persia, Xenophon writeth thus: They caried noe other armes, then bowes and slinges. They were excellent archers; and had bowes well nigh three cubits long; arrowes more, then two Cubits. When they shotte, they drew the string, applieng their hand some what toward the neither end of the bowe, setting their left foote forward. With their arrowes they pierced both targets, and Curates. The Gracians putting thonges to the middle of their arrowes sent them back at the enemy in steede of Darts. The same in effect is reported by Diodorus Siculus. Of the Parthian horsemen, Appian saith: When Crassus commaunded the light-armed to disband, & goe to the charge they went not farre, but meeting with many arrowes, and being fore galled with them, they retired streight, and hid themselves emongst the armed, and gaue beginning of disorder, and feare, representing to the sight of the rest, the force, and violence of the shotte, that rent all armes, they fell vpon, and made way afwell thorough bodies, that had the best, as the worst furniture defensue: giving mighty and violent strokes from stiffe and great bowes, and forcing out the arrowe boisterously with the compasse, and bent of the bowe. Plutarch hath the very wordes, that are in Appian. The Indians also were good archers, albeit not much praised by Q. Curtius. Hee saith: their arrowes were two Cubits long, which they deliver out of their bowes, with more labour, then effect: for as much as the arrow, whose whole efficacy is in lightnesse, becometh altogether vnwieldy by reason of the weight. And yet hee telleth, that Alexander, at the assault of the principall City of the Mallians, was strooke thorough his Curace into the side beneath the pappes with an Indian arrowe: with whome Plutarch and Diod. Siculus accord. Arrian addeth the wound was so deep, that his breath was choked.

as necessary for the price of the field (that long after gunnes were invented) preferred the English before all other, and setteth him downe, as a patterne for other to follow. And Patritius, disputing of the violence of arrowes, doubteth not to affirme, that an English arrowe with a litle waxe put vpo the point of the head, will passe through any ordinary Corlette or Curace. Howsoever the credit of bowes is lost, at this present, with many great souldiers, yet haue they of ancient time been highly prized. Vegeti. saith; how great advantage good archers bring in fight, both Cato in his bookes of military discipline doth shewe evidently, and Claudius, by augmenting the number of archers, and teaching of them the use of their bowes, overcame the enemy, whome before hee was not able to matche. Scipio Africanus (the yonger) being to giue battaile to the Numantines, that before had forced a Roman army to passe vnder the yoke, thought hee could not otherwise haue the better, vnlesse hee mingled chosen archers in euery Centurie. And Leo the Emperour in his Constitutions Military hath this Constitution emongst other: You shall commaund all the Roman youth, till they come to forty yeares of age, whether they haue meanes skill in shooting, or not, to cary bowes & quivers of arrowes. For since the art of shooting hath been neglected, many, & great losses haue befallen the Romans. And in another place: you shall enioyne the Commanders vnder you, in winter to take a view, and to signify to the Turmarches (Coronells) how many horse, & what kinde of armes the souldiers, vnder their commaundes, stand in need of, that necessary provision bee made, & the souldiers be furnished in time convenient. But specially you are to haue care of archers; & that they, whoe remaine at home, & haue vacation from warre, hold bowes and arrowes in their howfes. For carelesse heerein hath brought great dammage to the Roman State. So Leo. This of old time was the opinion of the Romans concerning archers. Howe wee are fallen out with them in our dayes (the skill of the bowe, being a quality so commendable, and so proper to our nation) I knowe not, vnlesse fire-weapons perhaps haue put them out of countenance. And surely it may not be denied, that the force of fireweapons of our time doth farre exceed the height of all old inventions for any one the enemy. And, when I haue given them the first place, I will not doubt to giue the second to bowes and arrowes: being so farre from casting them off, that I would rather follow the wisdom of the Gracians; woe albeit they esteemed arrowes the best flying weapons, yet thought it not amisse to hold in use slinges, and darts. Every weapon hath it property; and that which is fite for one service, is not fite for another. The fireweapons haue their advantages; They haue also their disadvantages. Their advantage is, they pierce all defence of armour, and lighting vpon a place of the body, the wound whereof endauereth life, they bring with them certeine death. Their disadvantages are, they are not alwayes certeine, sometimes for want of charging, sometimes

fire vpon the enemy at once. For the re: behind, discharging, shall either wound their owne Companions before, or else shote at random and so nothing endanger the enemy, the force of a musket being onely wearieable at point blank. Contrarywise the disadvantage of arrowes is in the weakness of the iooke, which is not able to enter a Cur- race, that the f:ore or horse neuer se. Yet can not weather bee founde, where in you may not haue good vse of bowes: raine, snowe, haile, f:ogges, hinder little especially the firing of the bowe being not so wette, may rather profit. Because in them you can hardy discern much losse at aside, the fall of the arrowe. As for quicknesse in deli:ery be bowe farre excelleth the musket. A good single archer is able to que: five shotte in an exchange for one of the muskietier, and that with such cert:iny, that you shall not heare of an archer that misseeth the deli:ry of his arrowe, where the muskietier, often f:ilth by re: sin of the accidents and imped:ments before by mee rehearsed. I thinke that a whole squad on of archers, being embattailed, may shote at once together: which onely the first ranke of muskietiers may doe. And make the case there were a hundred mus- ketiers, and a hundred bowe-men eche digested into ten files, eche file containing ten men, the bowe men shall bee able to shote at once a hundred arrowes (all these arrowes, for ten bullets given by the muskietiers, namely those ten of the first ranke discharging alone. It may not bee pretermitted, that the bowe and quiver both for marching & all service, are lighter and of lesse labour to use, then a musket, which is noe small advantage in armes and fight. To conclude: the bowe-men may bee placed behind the armed foote, and

and there teete littened to the grownde, whereby they were vnable either to fly, or fight. These wonders did the Partiban bowes, which notwithstanding were not to be compared to our ancient English bowes, either for strength, or farre shooting. And though it were not seeme to relye vpon antiquity alone. The battaile of Curzolare (commonly called the battaile of Lepanto) fought in our dayes betwixt the Turkes, & Christians by sea may serue for an experience of the service of bowes and arrows. In which there died of the Christians by the arrows of the Turkes above five thousand, albeit they were in gallies and ships, and had there blindes pretended to see from sight, and mark of the Turkes, where as the artillery of all sorts of the Christians consumed not so many Turkes: notwithstanding the Christians had the victory. Nowe then for vs to leaue the bowe, being a weapon of so great efficacy, so ready, so familiar, and as it were so domesticall to our nation, to which wee were wont to bee accustomed from our Cradle, because other nations take themselves to the Musket, hath not so much as any shewe of reason. Other nations may well forbeare that, they neuer had. Neither Italian, nor Spaniard, nor Frenche, nor Dutche, haue these five hundred years, been accounted Archers. It was a skill almost appropriated to our nation. By it, wee gayned the battailes of Cressly, of Poitiers, of Agincourt, in France: of Navarre, in Spaine: By it, wee made our selues famous ouer Christendome. And to giue it ouer vpon a conceit onely (for noe experience can say that our bowes were euen beaten out of the field by the musket) will proue an immitation of Aeps dogge, whoe carieng a peece of fleshe in his mouth ouer a river, and seing the shadowe in the water, snatched at the shadowe, and lef the fleshe. I speake not thus to abase the service of muskets, which all men must acknowledge to bee great; I onely shewe, there may bee good vse of bowes, if our archers were such, as they were wont: which is not to bee dispaired, and will easily come with exercise.

For the length, I give, it differeth not from the Roman darte in Polybius.
 c Xenoph. de exp. lib. 5. p. 112. D. & Diod. Sicul. lib. 14. p. 412.
 he saith they were longer, then two cubits, & addeth, the Gracians sent them backe againe at the enemy in steede of Dartes. About the middle of these dartes they fastened a thong, which was called *αἰμαλὶον*, wherein, inserting their forefinger, they launched the darte with more facility. Xenophon witnesseth it in the same place, and in another place hee saith, d Xenophon commaunded the targetiers to marche with their fingers in the thonges of their dartes, the archers with their arrowes knocked, the slingers with their scryppes full of stones, that they might be redy to let fly, when they were commaunded. These dartes were forcible enough to pierce armoures of that time, and that with them alone Iphicrates overthrew and destroyed a whole Mora of the Lacedaemonians, which people were accounted the best armed, and the most valiant of the Greekes, before the Macedonians came in credit.

9 Stones.] There are heere mentioned two manner of throwing stones, the one with the sling, the other with hand alone. The stones, thrown with the sling, fly with much more violence, then the stones throwne with the hand: and, being cast with a skillfull and strong arme, they reache a greater way, then a man would thinke. And yet not so farre, as bullets: throwne out of a sling, which by Xenophons report outreached the Persian arrowes. I have before touched the story: I will now lay downe Xenophons wordes. The Gracians (those ten thousand, that returned out of Persia vnder the leading of Cherisophus, & Xenophon) had not marched farre, before Mithridates appeared againe with 200. horse, and 400. Archers & slingers, which were very nimble & light. Hee came close vp to the Gracians as a friend. Being neer, some of his horse, & foote began to shoote, other to sling & to wound the Gracians. The reare Commanders of the Gracians were hardly bested. Yet could they doe nothing to anoy the enemy. For the Cretans shoote not so farre, as the Persians, & carieng noe armour of defence, they were faine to hide themselves with in the body of the armed; & the Darters were not able to reache the slingers of the enemy. Xenophon therefore having the rear, thought good to charge and follow the enemy. But hee was not able to overtake them, (for the Gracians had noe horse) & the Barbarian horsemen, shooting backward in their flight, wounded many of them, that gaue the chace. To remedy this inconvenience Xenophons advice was to provide horse as many, as they could. And hearing, that there were many Rhodians in the Campe, skillfull in slinging, whose slings reached twice as farre, as the Persian sling (for the Persians vied stones, that filled the hand the Rhodians leaden bullets) hee likewise advised to armethem with slings, and vse their service. The next day the Gracians furnished out 50 horse, & 200. slingers. And when Mithridates shewed himselfe againe with a thousand horse, & foure thousand archers, & slingers, and came vp to charge, both the Rhodian bullets lighte among the Persian arrowes, and the Persian arrowes

lent in slaying. Of other nations none might compare with the Balcars of whom I have ment in slaying. Diodorus Siculus writeth thus: Their armor is three slinges, whereof they haue one about their heads, another about their waite, the third in their hand. In warre they cast greater stones, then any other, and with such force, that they may seeme to bee sent out of a Catapult. Therefore in sieges and assaults of Cities they wound the defendants of the walles, and in the field broake targets, and head-pieces, and all defensiu armies. They ayme so certainly at any marke, that they seldom faile in hitting. The cause is their continual practise from their childehode, their mothers continually enforcing them to sling, even when they are yet children. For setting vp bread vpon a poste, as a marke, they are not allowed to eate, vntill they hitte it, and haue it given them by their mothers to eate. So farre Diodorus Siculus: with whom Vegetius agreeth. The same Vegetius saith that slingers were made either of flaxe, or of a haire. The forme was that it had two ends, the one fastened to the hand, the other to let slippe, being broadest in the middle, lest the stone should fall owte. Diodorus hath before expressest with what force a stone went out of a sling. Vegetius addeth, that they are more violent, then any arrowe: piercing head pieces, Curaces, and other armis. The same Vegetius limiteth the space of their reache to six hundred foote: and saith, that slinges at that distance were seene often to hitte the marke: and attribureth as much to archers. There are, that affirme, that a leaden bullet sent out of a sling will melt with the vehement motion of the aire. Let the credit bee with the reporters. Wee haue not found that experiences in our pieces, which notwithstanding force out their bulles with fire, & that with greater violence, then any hand sling can doe. For stones to bee cast with the hand see Vegetius. Polybius commendeth the vse of them.

10 The armour of the Argilos] What this Argilos should meane, I see learned doubt, and I haue little to say. Whether it come as a diminutive from *αἰγίον* (swiss) or from a City of Thrace, called Argilos, or from any other originall I will not affirme. Heere if the text bee not corrupted, and the word except in, or exchanged by the negligence of some copier, it must signifie a targetier. Which Alians description maketh evident. That there was such a City in Thrace you shall finde in the Thacyades. And that the Thracian foote for the most part were Targetiers, I remember, I haue read in Xenophon. But then a question may againe arise, slinging the inhabitants of that City were not called argiloi but arguioi (for the City it self was called Argilos) why the Targetier should be called Argilos, and not Argilios. The change is not great. Many such mistakings are to be found in transcribing of Copiers. But I thinke rather there is an error in the text; and that for two causes. First because Alias dividing the foote into three kindes, Armed, Targetiers, and light-armed, and dis-

11 A little light target called Pelta. The forme of this little target is diversly
 expressed by divers Authors. The Scholiastes of Thucydides giveth it a Trapezonall
 or four sided shape: with whom also I impet^r Suidas, & Hesychius saith, Pelta is a little
 target having noe circumference, meaning, I thinke, it is not round. Hee saith al-
 so it is a Thracian weapon: to both which significacions Suidas agreeth. The Thraci-
 ans vsed these kindes of Targets, and often sent these Targetiers to serue the Grecians.
 d Thucyd. lib. 2.
 118 C
 e Xenoph. de ca-
 p. Cyri. lib. 7.
 410 E
 f Xenoph. hist.
 Græc. lib. 3. c. 48
 g Suidas in In-
 dex
 h Diodor. lib. 15.
 108. Aemilius
 Prob. in Iphicrate
 i Aemil. v. Pro-
 bus in Iphicrate.
 k Xenoph. de ex-
 ped. Cyri. lib. 1.
 269 C
 l Xenoph. lib. 1.
 5. 147. A. & lib. 1.
 121 C & lib. 4. 341
 m Xenoph. histo-
 græc. lib. 3. c. 72. E
 n Polybius. Com-
 ment. in Polyb.
 o Polyb. lib. 6.
 491. C
 p Suidas in Pe-
 pana.

after the Trumpet sounded, and many of his souldiers came to his aide, the Thracians
 fled casting, as their manner was, their Targets (Peltas) at their backs. When
 Dercyllidas invaded Bithynia, Seuthes the King of Thracia sent him horse and Peltaists (tar-
 getiers) to his aide. But the Pelta, that Alian beere mentioneth, was rounde.
 Suidas in the wordes, before alleaged by Lipsius, as out of Alian called this target As-
 pidice: that is a little Alpis, such as the Macedonians bore, which were without all
 question rounde. The invention of this Pelta is attributed to Iphicrates the Athe-
 nian. For whereas the Athenians before his time vsed large round targets (aspides)
 which were not so easy to bee wielded, being heavy, he provided them little targets to
 make them light, and quick for all service. He altered not the forme of the round-
 nesse, but diminished the weight, in abating of the breadth. Aemilius Probus saith,
 hee made them beere little targets (Peltas) in steede of large rounde targets
 (Parme,) where vpon they were ever after called Peltaista. The invention
 therefore of this kinde of Target is attributed to Iphicrates. For the little targets of other
 formes were long before the age of Iphicrates. Cyrus the younger had Grecian Targetiers
 in his army: and the Grecians at their returne out of Persia: and likewise those, that
 ioyned with Thrafsbulus to recover Athens out of the handes of the thirty Tyrants. All
 from the Parma velitaris of the Romans, which double sew is round. Polybius saith,
 the Roman horse-mens targets (Parme) were like to Cakes named Popana,
 which according to Suidas were broad, rounde, thinn cakes.

12 And his pike is much shorter. If it bee as Diodorus Siculus and Aemilius
 Probus report, that Iphicrates was the inventor of the armes of the Targetier, the pike
 should bee little shorter, then the Macedonian pike. Hee gaue them little targets for
 great Targets, and doubled the length of their pike, and sword. If the length of the pike
 were doubled, I cannot see, how it should come much shorter of the Macedonian Pike.
 But it may bee, they were long at first, and that afterward vsed, and commoditie brought
 them to a lesse size, to the end the souldier should bee nimble and ready at charges. But
 had the Peltaist noe other armes, then are beere mentioned? Hee had. And first hee had
 a linen Curace for lightnesse sake, and then a sword of double length to his former sword.

q Aemil. Prob.
 in Iphicrate.

many other. In perusing the story of Alexander (in Arrian, the most faithfull histo-
 rian of his deedes) I find noe Targetiers by the name of Peltaista in all his army. The
 names of Armed, of archers, of Darters, of slingers I meete often: but not of Pelta-
 istæ. Which made mee once doubt, whether Alexander ever vsed them or noe. Since
 vpon better consideration I am induced to thinke, though the name in the story faileth,
 yet the kinde of souldiers, so armed, and so appointed, as Alian describeth, may easily bee
 found: and that vnder the name of Hypaspistes. Which name albeit most vsually signifie
 him, that carries another mans Target, yet is it also applied to souldiers, that are neither
 light, nor heavy-armed, of which kinde the Targetiers were, as a meane betwixt both. That
 Hypaspistes signifieth noe heavy-armed, may bee evident by the wordes of Arrian: Alex-
 ander, when hee sawe the streights of Cilicia possessed with a strong garr, left
 Parmenio behinde withall, that were heavy armed, himselfe about the first,
 watche taking the Hypaspistæ, and the Archers, and the Agrians (who were
 darters, as I haue shewed) led on in the night toward the streights, purposing
 to fall vpon the watche, before hee was looked for. Hee left all the heavy-armed
 with Parmenio, and tooke the Hypaspistæ with him. And in another place hee
 saith: Alexander commaunded the Hypaspistæ first to passe the river, and af-
 ter them the Macedonian armed. Hee distinguisheth the Hypaspistæ from the
 armed. And straight after: Three dayes after Alexander vnderstanding that
 Cleitus & Glaucias were ill lodged with their army, & neither held watche,
 nor had cast a trenche for their owne security (for they imagined Alexander
 marched away for feare) and that their Campe was stretched out to a need-
 lesse length, secretly repassed the river a litle before night, leading with him
 the Hypaspists, and the archers and the Agrians, and the Phalanges of Per-
 diccas and Cœnus. And in the same booke at the assault of Thebes, when Perdiccas
 had engaged himselfe and brought Amyntas with his troups in the same danger, Alex-
 ander lothe to leaue them in hazard, advanced with the rest of his army, and gaue a signe to
 the archers and Agrians to enter the trenche, the Agemata (Livy tranlateth them legions)
 and Hypaspists hee held without. So that in all these places hee distinguisheth them from
 the heavy armed, and maketh the Hypaspists one, the heavy-armed another. I might
 alleage other passages out of the same author, but these will suffice. That they were not of the
 light armed may bee proued by the same places of Arrian. Where they are alwaies distin-
 guished from the archers and Darters. These targets make them vnfit for slingers, and
 mention of slingers I find in other places. The very name sheweth that they carry targets,
 and the great Etymologicon alloweth them spears beside their targets. Whereby they are
 clearely exempted from the light armed. It remaineth then, that they be the peltaista, which
 Alian beere speaketh of, especially since they were armed with target and speare, which
 armes hee giveth to his targetiers, and to no other, except it be to the armed.

13 Cataphracts The horsemen are diuided into two kinds, Cataphracts compleat

b Xenophon de re-
 mil. lib. 1.
 148 D.

they armed their horses with frontlets and pectorals & covers for their
 thighs. As much hee saith of the six hundred horse that followed Cyrus the younger
 against Artaxerxes, saying they armed cover for their thighs. The horsemen themselves
 he giueth great Curasses, and cuisses, and head-pieces. So it appeareth that the horse were
 not all over armed, but onely their heads their breasts and their forehigges. Yet Plutarch
 speaking of the Cataphracts in the time of Lucullus, saith, their legges, and shigges were
 unarmed. Concerning the Parthians Sordas, I know not out of what author, hath thus:
 The Curasse of the Parthian horsemen is made in this manner: The part be-
 fore covereth his breast, and thighs, and his hande to the fingers end, and his
 leggs. The hinder-part, his backe, and necke, and all his head. There are but-
 tons made for the sides, with which both the parts being fastened, it maketh
 the whole horsemen scene, as if hee were made of iron. The iron neither hin-
 dreteth the stretching out, nor the gathering vp of his limbs, it is so exactly fit-
 ted to the nature, and life of all parts of the body. Likewise they arme there
 whole horse with iron, except his hooves, because their owne armour would
 little avails, in case their horse miscaried. Curtius describeth the forme in the Per-
 sian horsemen, & horse furniture, hee saith, was made of plate fastened together in
 continued dependances of scales of iron. Appian speaking of the Parthians seeking
 to terrify Crassus, and his army, upon the suddaine cast away the covers of their armour,
 and both themselves appeared in shining curasses, and head-pieces the Macedonian of
 which they were made: darning forth a flashing, and disappeared with in light, and their
 horses glistering in brasse, and iron furniture. Yet doth Appian in the same place note,
 that the bellies of these horse, was not armed. For the french horsemen, saith hee, that
 followed young Crassus, when they perceived, how little they prevailed with
 their staves against the Parthians, and vnperceable armour of the Parthians, light-
 ing from their owne, and creeping vnder the Parthian horses, strooke them
 into the bellies, and they impatient of paine and flinging heere, and there, and
 treading vnder foote, as well their riders as their enemies, died in the place.
 Plutarch hath the like. The Cataphracts, besides their armour of defence, had a lance, or
 horsemans staffe, to fight withall. Plutarch affirmes it: Lucullus, saith hee, after
 hee sawe Tigranes his Cataphract horsemen (whose were of most account) de-
 fended, as it were, by a hill, that had the ground aboute plaine, and broad, &
 the ascent (which was about fower furlongs in length) not very hard, or
 steepe, commaunded the Thracian, and gaule horsemen, hee had, to giue vp-
 on the flanke, and to put by the launces with their swords: For the onely
 strength of the Cataphract is his lance, and it alone hee is able to vse either
 in defence of himselfe, or annoying the enimie: being by reason of the weight
 and harshnes of his furniture like a man shutte, and looked vp in a wall. Neither
 do Plutarch. Like wise the Parthians in Cataphracts, albeit they used bowes, and arrows, yet they
 had also launces, with which they came to the fight.

e Appian in Parth.
 148 D.

f Plutarch in Lucull.
 148 D.

g Plutarch in Lucull.
 148 D.

h Xenophon de re-
 mil. lib. 1.
 148 D.

taking in hand their launces, ranne vpon the Romans, whose giuing a iointe
 shewte sprung vp presently, and striking them with their darts, slewe the first,
 and put the rest to flight. By these two testimonies the launce of the Cataphract is
 clearly proved. In what manner the Cataphracts came to fight, Nazarius (cited by
 Steuechius) sheweth plainly in a Panegyricke of his. The Cataphracts, saith hee,
 in whome was the principall strength of the field, vse this discipline in char-
 ging. After closing their files, they keepe an equalitie in moving forward to
 charge, & being free from wounds, they break without difficulty any strength
 of battell opposed against them. They are made to bee free from wounds, because
 both themselves & horses (especially before) are covered with sure armes. Their moving
 must be slow, because of the weight of their armes, which slownesse was recompensed with
 the violence of their charge, which neither horse, nor foote was able to resist. And yet
 they had another inconvience, in that, being overthrowne, or slipping, or falling to the
 ground, neither horse, nor man, were able easily to raise themselves againe. Such was the
 weight of their armour.

a Appian in
 Parthica 144. A.

14 Launciers are such] Launciers, saith Elian, iointe with the enemy, & fight
 hand to hand with the lance. And did not the Cataphracts so? They did, but their
 armour differed much. The Cataphracts both horse, and man, were all over armed. The
 horse of the Launciers was not armed, and himselfe, albeit hee were armed, yet not so
 armed, but that many parts of his body were bare of armes. And his armour came much
 short of the compleate. Arrian saith that the Macedonians being launciers were not
 able to encounter with the Scythians, whose were Cataphracts, both because of their num-
 ber, and also of their manner of arming. And as the Launciers armour was not so
 heauie, as the compleate, so was it more heauie, then the armour of the foote. Xenophon
 seemeth to signifie so much, telling of himselfe, that taking the targetiers of the
 front, and some out of the midit of the hollow square battaile, and three hun-
 dred chosen men, that Cherisophus had with him in the front, hee marched
 away with all speed to seife vpon the toppe of a certaine hill. And exhorting
 his souldiers to haste, you may well, quoth Sotridas, the Scionian, talke of
 haste, that are on horseback. In the meane time with this heauie target, am-
 scarce able to marche. Xenophon hearing this, streight dismounted, and dif-
 ranking Sotridas, tooke away his target, and with it on his shoulder conti-
 nued his haft in marching. By chance hee had on at that time a horsemans
 armour, where with although he were overpressed; yet slacked hee nothing of
 his pace. The rest of the souldiers beating and reviling Sotridas compelled
 him both to his target, and place againe. At last they gained the hill, they
 purposed, and made the enemy abandon the nether ground. Xenophon was
 heere overpressed with the horsemans armour. If it had bene but equall in weight with a
 foote mans, hee might, as well haue endured it, as the rest. Plutarch sheweth likewise the
 launciers.

b Xenophon de re-
 mil. lib. 1.
 148 D.

c Plutarch in Lucull.
 148 D.

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 in commodities. For, being made slender and quivering, they neither could
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 the remnant of the staffe was of noe vse. The targets they had, were made of
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 a sure & vnfailable vse. Which they noe sooner saw, then imitated. For the Ro-
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17 Tarentines] They are so called of a City in Italy Tarentum by name, the
 inhabitants whereof, that were horsemen, used this manner of fight. But he maketh two
 kinds of Tarentines; one, that ever fought a farre off with darts, and never came to
 hand with the enemy, the other, that after a dart or two cast, came close vp, and fought
 hand to hand. ^c *Livy* speaketh of a third kind of Tarentines, who used in fight two
 horses at once made fast together, and one being weary, leaped upon the back of the
 other.
 18 Some vse darts a farre off] Of the manner of fight of these horsemen, the pas-
 sage of Xenophon is worth repeating. ^a After these things done, saith hee, the aide
 of Dionysius (which hee sent the Lacedemonians) arrived, being more, then
 twenty Gallies. They brought French, and Spaniards, and about fifty horse.
 The next day the Thebans, and their confederats, embarrailing their ar-
 mie, and filling therewith the whole plaine even to the sea-side, & to the hills,
 that lay about the City (of Corinth) destroyed whatsoever, might serve to
 any vse. The horsemen of the Athenians, and Corinthians, seeing the strength,
 and multitude of the enemy, came not neere vnto them: but the horsemen of
 Dionysius, albeit fewe in number, galloping heere, and there, dispersedly, and
 putting spurs to their horse, charged them with their darts, and in case the
 enemy followed, they returned with all speed, and then turned againe, and
 threw darts afresh. In doing these things they used to alight from their
 horse, and rest themselves, and if any of the enemy singled out to fall vpon
 them, leaping quickly againe to horse-backe, they fled: and being pursued
 any distance from the army, as soone as those that pursued them retired, the
 Tarentines followed, and plyed them with their darts, and put them to great
 distresse: forcing the whole armie to advance, and retire, as they list them-
 selves. So farre Xenophon. Another example I will add out of *Livy* of the
 Numidians, whose manner of fight is all one with the Tarentine manner. ^c In *Ligu-*
 ria saith hee, nothing worthy of memorie was done a long time. At the end of
 the yeare all things were brought to extreame hazard. For both the Consuls
 camp, being assaulted, was hardly defended, and not long after, when the ar-
 mie was led through a Forrest, the way whereof was streight, and narrowe,
 the Ligurians possessed themselves of the mouth of the straights. Through
 which when the Consull could find no passage, hee turned about his armie,
 and purposed to reduce it, the way he came. But the mouth of those straights
 was likewise possessed by a part of the enemies forces. And now the remem-
 brance of the Disaster of Caudium presented it self not onely to the minds,
 but even almost to the eyes of euery man. There were wellnigh eight hun-

and a head thrust out at length. They purposely augmenting this contempt
 fled from their horses, and dallied, and sported, to bring the enemy to a gaze.
 Wherefore the enemy, which at first were intentiue, and ready for a charge,
 became gazers on, and the most part vnarmed themselves, & sett downe vpon
 the ground. The Numidians rode vp neerer, and then backe againe, and by
 little, and little, gott to the skirts of the forest; as if their horses, being resty,
 had caried them forward against their wills. At last, putting spurs to, they
 broke through the midst of their enemies gards, & entering into a larger field,
 they sett fire on all the houses next the way; then burned they the next vil-
 lage, and wasted, and filled, all things with fire, and sword. The smoke first
 scene, then the cry of the people affrighted, lastly ould men, and children,
 fleeing for succor, raised a tumult in the campe. Therefore without counsell or
 command every man of himself ranne to the defence of his own; and in a
 moment both the enemies camp was forsaken, & the Confull, delivered from
 his siege, came to the place intended. By these two examples the kinde of fight, that

*these darters on horse-backe maintained, may be perceived, which was not to come neer
 the enemy, but to keep a loose, and lest their darts fly. Besides not to obserue any order
 in files, or ranks, but straglingly to gallop the field, seeking by their disbanding to tolle
 the enemy out of his strength, and so to worke their advantage. And albeit in the
 second example, the Numidians vsed not their darts, yet they would haue done it, if need
 had bene; and you shall find in other places of Livy, and Polybius, they did vsually, as
 also in Caesar.*

19 After they haue spent one or two] These darters on horsebacke differ from
 the other before mentioned, because at the last they ioyne, and fight hand to hand with the
 enemy; which the other did not. And what fight they wish all: not with launce; for
 then should they be Lanciers, of whom wee haue spoken. But they fight with battel-axes,
 swords, and such other short weapons. Suidas affirmeth it, alleged by Arterius:
 I these, saith hee, at first cast light darts a farre of, and afterward approaching,
 joyne with the enemy, fighting with battell-axes, or swords; which kind they
 call light-horsemen.

20 The horsemen, that vse bowes] I need not alledge any thing to shewe that
 the Scythians were good archers. It is knowne to any man, that is not ignorant of Hi-
 story. I will onely note, that in fleeing from the enemy, they harmed as much, as in fal-
 ling on. For as they fled they turned half their bodies backward, and shotte at him,
 that followed, and executed noe such thing. Of which fashion of fight Plutarch giueth
 this iudgement. The Parthians, saith hee, in their flight shoote backward, &
 doe it best of all other, except the Scythians; the invention being witty, both
 to saue themselves by that defence, and also to take away the shame of flight.

But seeing every Phalange containeth an vniting of bodies, offices of Di-
 rection aswell for daily exercise, or traying, as for true fights, It seemeth neces-
 sary to deduce euery of these things into perticularity. The first labour there-
 fore in the art T actick is for a Generall out of a multitude, that cometh to hand
 consuled, to choose the fittest men, and dispose them into convenient places
 (that is to order them into files, and bodies) and of the whole number to pro-
 portion a reasonable leuie, & fitting the service in hand. For to dispose and
 enable an Army, skillfully to march, to encampe, & to embattaile, is a matter
 of no small consequence. In asmuch as we often find mightie Armies through
 their disorder to haue been defeated by a handfull of men wel disciplined &
 exercised. Wherefore Aeneas defineth this art to bee a science of warlike motion:
*Polybius, To be a skill whereby a man taking a multitude serviceable or dereth it into files,
 and bodies, and instructeth it sufficiently in all things pertaining to warre.*

Notes.

1 THE first labour] After provision of armour followeth choice of men.
 What men, and out of what climats, and of what profession, and of what age,
 and of what constitution of body, and of what education, are to be chosen, because Elian
 referreth to the discretion of the Generall, not setting downe any particular. I will likewise
 passe over, noting onely some places, where hee, that is disposed to seeke, may finde the cir-
 cumstances of choice of souldiers. Xenoph. Cyrop. lib. 1. 3. 2. A. B. Polyb. lib. 6. 40. C. Et
 Lips. ad Polyb. lib. 1. Dialogo. 2. 3. 4. 5. Veget. lib. 1. cap. 2. 3. 4. 5. 6. 7. Et Steuwichius ad
 hoc omnia cap. 31.

2 A reasonable leuy and fitting the service] Leuyes are to be made according
 to the warre, which is vnderaken. The enemy is not alwaies of one strength. Sometimes
 the forces, against which wee are to lead our armie, are more, sometimes lesse. The Ro-
 mans, if the number of enemies were not very great, vsed but a Consular Armie; which
 consisted of two legions of Romans, and of as many foote of their Allies; when greatest,
 onely ioyned two Consular armies together. And for Allies their foote, as I said, was
 equal with the Roman foote, their horse were treble as many, and the Romans having
 three hundred horse to a Legion, the Allies had nine hundred. Tet in case of great
 necessitie, wee read, that the number of the Legions was increased in a Consular
 armie. Polybius reporteth that, a little before the battaile of Canne, the Con-
 suls Lucius Aemilius, and C. Terentius, had allowed in their armie, which they led
 against Anniball, eight Legions, which neuer was done before. Alexander

See Leo cap. 4. 5.
 Et cap. 11. 14.

polyb. lib. 1. 2. 10
 Polyb. lib. 1. 3. 17.

polyb. lib. 6. 40. 9

Diod. Sicul. lib. 17. 71.

o Polyb. lib. 1.
 3. 17. 18.

B Liv. deinde 3.
 B. 3. 13. C. B. Polyb. lib. 1. 3. 17. 18.
 e Ceteri de bell.
 ap. Aelian. 41. 5

d Arter. in notis
 ad Aelian. pag.
 829.

d Plutarch in Cret.
 & Appian in Syria.
 lib. 1. 14. C.

f Xenoph. Cyrop.

were, the principall heads of the art of warre, Marching, Incamping, and embattailing; to which heads all other may very well bee referred. And of these three Alian handlets in this treatise but two, namely embattailing, and marching: of embattailing, so much, as pertaineth to forming of a common Macedonian Phalange; of Marching, no more, then belongeth to embattailing in a march, that is to ordering of your men in that figure, which shall yeald most advantage against the enemy, that meeteth you; excepting that hee shortly toucheth the marshalling of baggage in your marche. The other considerations of marching, as laying, or avoyding ambulches, lending out to discover, when to march by night, when by day, how to deceiue and avoyde the enemy by enging neere, remedies against horse, against shotte, against multitudes, passages of mountaines, of woods, of rivers, of plains, of drye, and sandy places, these, I say, and such like, hee toucheth not in a word. And for the skill of encamping, which comprehendeth the seating of your camp, and provision of all things belonging thereto, as also the siege, and defence of Citties, and fortresses, hee likewise passeth it over with silence, as a thing not incident to his purposed discourse.

4 A handfull of men well disciplined and exercised] What exercise doth for the making of good souldiers, experience of former times will teach. It hath been the manner of all famous generalls to bring their souldiers to perfection by exercise. ^{c Veget. lib. 1. c. 24.} Vegetius saith very well, It is not length of life, or number of yeares, that teacheth the art of warre, but continuall discipline & meditation of armes. Let a souldier serue never so many years, so long, as hee is vnexercised, hee shall bee still a raw souldier. The knowledge and science of armes maketh a souldier, which is not gaigned but by action. As long as a souldier handleth not his weapons, hee is noe Actor, but a looker on. For as all abilities in artes (which are called Habits) arise out of a number of actions preceading, so can noe man attayne to a perfect knowledge of armes, till hee haue with care, and diligence, employed his study and labour therein, and vpon the foundation of practise raised the frame of sound and perfect skill. Noe man is naturally borne a souldier. One may more incline to warre then another, but the skill commeth not without industry and paines. ^{¶ Plut. in Prioc.} Plutarch saith, that it is neither Eurotas nor the place betwixt Babyx and Gnacion, that bringeth forth valiant and warlike men, but they are to bee found in all places, where youth is bred vp in shame of vice, and boldnesse to vndergoe perill for vertues sake. Eurotas was a river ^{¶ Plut. in Lyc.} neere Lacedaemon; Babyx and Gnacion two rivers within the same City. The Lacedaemonians were accounted the most valiant people of Greece. And Plutarch speaketh thus of the victory, which the Thebans had against the Lacedaemonians; The Thebans, which till that day had noe reputation of valour, but afterward by exercise, & use of armes, vnder Epaminondas, and Pelopidas, became the bravest souldiers of Greece. Not vnlike was the scienc of Pyrrhus to his muster-master. choose you souldiers

new for the exercises; what was the manner of his discipline; and how hee was instructed, against a multitude vnskillfull, and vnrained, I need, say nothing. Histories are plentifull with such therein. I will onely recite one example wherein the difference may bee seene not between skillfull, and vnskillfull, but between skillfull, and skillfull both ensured to labour, and both brought vp vnder the same practise, and discipline of Armes. At what time, after the death of Alexander the great, his chiefeest Commanders fell at oddes emongest themselves; and sought every man to establish himself in the possession of his Conquests, it chanced, that Antigonus, and Eumenes came together in two sundry battailes. In the first Antigonus had in his army about 28000. foote, 1500. horse, & 65. Elephants; Eumenes lesse foote, 17000. in all (but emongest them 3000. Argyraspides, whoe had served in all Alexanders battailes, & were invincible, & strok a great feare into the enemies hearts) & about the number of horse, his enemy had, & 20. Elephants. ^{a Diodor. Sicul. lib. 19. c. 7.} When the foote came to ioine, saith Diodorus Siculus, the fight continued a good while, & at last, many falling on either side, Eumenes his foote had the better by reason of the valour of the Macedonian Argyraspides. They, albeit they were stroken in years, yet in regard of the manifold perills, they had been in, excelled in courage, & skill of fight, in so much that no man was able to withstand them. And therefore being but 3000. in number, they were notwithstanding sett against the enemy, as the strength of the whole army. In the other battaile he speaketh of their age. ^{b Diodor. Sicul. lib. 19. c. 693.} At that time, saith he, the yongest of the Argyraspides were noe lesse, then 60. yeares olde, or thereabout; the most of the rest about 70. & some were elder, al of the vnmatcheable in skill & readinesse of fight, & strength of body; such was their dexterity, and courage gathered in continuance of dangers, which they had passed. Afterward rehearsing the battaile, he saith: The Argyraspides ferring themselves close, and with liuely force falling vpon the enemy, killed some, and put other some to flight. And fought against the whole Phalange of the enemy with irresistable fury, not loosing one of their owne men, & yet through skill & manhood slaying of the enemy about 5000. & routed their whole foote, which in number were many times more, then themselves. Thus writeth Diodorus Siculus of the olde practised Macedonians: who yet sought not against straungers, or rare souldiers, or such, as were newly brought into the field, but against men of their owne nation, that had long handled armes, & wonne many victories, & been instructed, and trained in the same discipline and course military, that they themselves had been before: Such difference long practise, and experience wrought in the one against the other.

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4 A handfull of men well disciplined and exercised] *What exercise doth for the making of good souldiers, experience of former times will teache. It hath beene the manner of all famous generalls to bring their souldiers to perfection by exercise.* ^c Vegetius saith very well, It is not length of life, or number of yeares, that teacheth the art of warre, but continuall discipline & meditation of armes. Let a souldier serue never so many yeares, so long, as hee is vnexercised, hee shall bee still a raw souldier. The knowledge and science of armes maketh a souldier, which is not gaigned but by action. As long as a souldier handleth not his weapons, hee is noe Actor, but a looker on. For as all abilities in artes (which are called Habits) arise out of a number of actions preceeding, so can noe man attayne to a perfect knowledge of armes, till hee haue with care, and diligence, employed his study and labour therein, and vpon the foundation of practise raised the frame of sound and perfect skill. Noe man is naturally borne a souldier. One may more incline to warre then another, but the skill commeth not without industry and paines. ^d Plutarch saith, that it is neither Eurotas nor the place betwixt Babyx and Gnacion, that bringeth forth valiant and warlike men, but they are to bee found in all places, where youth is bred vp in shame of vice, and boldnesse to vndergoe perill for vertues sake. Eurotas was a river

^e Plut in Lycor. neere Lacedemon; ^c Babyx and Gnacion two rivers with in the same City. The Lacedemonians were accounted the most valiant people of Greece. And Plutarch speaketh thus of the victory, which the Thebans had against the Lacedemonians; The Thebans, which till that day had noe reputation of valour, but afterward by exercise, & use of armes, vnder Epaminondas, and Pelopidas, became the bravest souldiers of Greece: Not unlike was the science of Pericles to his master, neither the people more skillfull

now for the sciences, than the Athenians; and as much more skillfull, and vntrained, I need, say nothing. Histories are plentifull witnesses therein. I will onely recite one example wherein the difference may bee seene not between skillfull, and vnskillfull, but between skillfull, and skillfull both enured to labour, and both brought vp vnder the same practise, and discipline of Armes. At what time, after the death of Alexander the great, his chiefeft Commanders fell at oddes emongst themselves; and fought every man to establish himself in the possession of his Conquests, it chanced, that Antigonus, and Eumenes came together in two sundry battailes. In the first Antigonus had in his army about 28000. foote, 8500. horse, & 65. Elephants; Eumenes lesse foote, 17000. in all (but emongst them 3000. Argyraspides, whoe had served in all Alexanders battailes, & were invincible, & strook a great feare into the enemies hearts) & about the number of horse, his enemy had, & 20. Elephants. ^a When the foote came to ioyne, saith Diodorus Siculus, the fight continued a good while, & at last, many falling on either side, Eumenes his foote had the better by reason of the valour of the Macedonian Argyraspides. They, albeit they were broken in yeares, yet in regard of the manifold perills, they had been in, excelled in courage, & skill of fight, in so much that no man was able to withstand them, And therefore being but 3000. in number, they were notwithstanding sett against the enemy, as the strength of the whole army. In the other battaile he speaketh of their age. ^b At that time, saith he, the yongest of the Argyraspides were noe lesse, then 60. yeares olde, or thereabout; the most of the rest about 70. & some were elder, al of the vnmatcheable in skill & readinesse of fight, & strength of body; such was their dexterity, and courage gathered in continuance of dangers, which they had passed. Afterward rehearsing the battaile, he saith: The Argyraspides ferring themselves close, and with liuely force falling vpon the enemy, killed some, and put other some to flight. And fought against the whole Phalange of the enemy with irreistible fury, not loosing one of their owne men, & yet through skill & manhood slaying of the enemy about 5000. & routed their whole foote, which in number were many times more, then themselves. Thus writeth Diodorus Siculus of the olde practised Macedonians: who yet fought not against strangers, or rauen souldiers, or such, as were newly brought into the field, but against men of their owne nation, that had long handled armes, & wonne many victories, & been instituted, and trained in the same discipline and course military, that they themselves had been before: Such difference long practise, and experience wrought in the one against the other.

^a Diodor. Sicul. lib. 19. c. 7.

^b Diodor. Sicul. lib. 19. c. 7.

The number of a file is diversly given, * for some allow it eight, some twelve, and some sixteen men. Wee for this time will retain the number of sixteen, both because that number is proportionable to the indifferent length of a Phalange, and also, if we require any time to double the depth thereof, and to give it thirty two men, or to lessen, and contract it, and make it but eight; neither of both shall hinder the service of the light-armed behinde, * for whether they use Darts, or Slings, or Arrows, they may caslie with their sleng weapons overteache the depth of the Phalange.

Notes.

Next after arming, and choyce of souldiers, it followeth to put them in order for service, that is first to file them, then to band them (which is signifying of files) and lastly to combattle them, which is to make a Phalange. Of these in the following chapters.

To make files] The Tactics have not expressed the precepts of this art, all in the same wordes. A file is heere called Lochos, the signification whereof is Ambush: it is taken for an Ambush, and Lochan signifies to bein Ambush: it signifies beside a number of men, that are of one body, as it were, and under one commander, who is called Lochagos, and Lochizo is to sett in files. The number of this body hath beene diversly taken. The Thebans Lochos Hieros first instituted by Gorgidas, or as other say by Epaminondas, consisted of three hundred men. The Lochos of the Lacedemonians of five hundred and twelve.

Xenophon in his returne out of Persia telleth, that the number of the Lochoi of the Gracians, which hee leade, was almost a hundred armed men. And when they chose extrao'dinarie men to preserve the Plæsum (a hollow forme of square battaile) where in the Gracians marched) from breaking, they appointed six Lochoi, of a hundred a piece, for that purpose, and Commanders to leade them. And after heerecometh seventy men to a Lochos. And in the first booke of Cyrus his expedition, hee telleth * of two Lochoi of the armed of the Regiment of Atenan, that were laine by the inhabitants of Cilicia, and counted them a hundred men. Cyrus in the same Xenophon commandeth his Lochos to be made of twenty four men. But the Lochos, that Alian heere speaketh of is a less number, namely sixteen, which was the file of the Macedonians, as appeareth by Arrian, and Polybius. Albeit Arrian calleth it not Lochos, but Decas, and Polybius the depth of the battaile. This number of sixteen was used by the Gracians also before King Philips time, as appeareth by Xenophon in his historie of the Gracians. And likewise by Thucydides, who reporteth, that the Siracusians were so ordered against the Athenians. Leo saith it was the manner of the auncient warriors to make a file of sixteen, and calleth it a Tetragonall number.

2. Some allow it eight, sometwelue] The Lacedemonians made the depth of their battaile sometimes eight men (for a file is it, that meashureth the depth of the battaile) and so fought with their enemies. * Thucydides witnesseth as much: the Lacedemonians, saith hee, were not alwaies ordered in depth alike, but as their Lochagoi (they were commanders of five hundred and twelve a piece) thought good, commonly notwithstanding the depth was of eight a piece. * Xenophon also writeth, that Dercylidas the Lacedemonian, being to fight with Tissaphernes, and Parnabazus, ordered his Phalange into eight. The same proportion was belde by Anaspissus the Lacedemonian against the Corcyrans, and

and by Clearchus the Lacedemonian against his enemies. Xenophon saith, that Thrasibulus the Athenian, sailing out of Pyraum against Pausanias the Lacedemonian King, ranged his men into eight. His wordes are: * When Thrasibulus and the other armed sawe these things, they quickly gave aide to their owne people, and put their armed in order eight deepe. Pausanias being hardly layed vnto, and retiring foure or five furlongs, commaunded the Lacedemonians, and their Allies, to resort vnto him, and there casting his men into a deepe Phalange, ledde against the Athenians. Out of which wordes we may note, that the Lacedemonians observed not alwaies that order of eight deepe, but varied according to place, or other circumstance. Yet ordinarily they gave but eight to a file, or to the depth of their Phalange, as Thucydides witnesseth before. * The same Thrasibulus with his complices entering the base City of Athens called Pyraum to free his cuntry from bondage of the thirty tyrants, having but a few with him, possessed the court, which led to the temple of Diana, called Munychia, and being assaulted by the garrison of the Lacedemonians, ordered his armed men into ten deepe, and the light armed behinde them. The tyrants, and their followers stood in battaile fifty deepe. * At the battaile of Leuctra the Lacedemonians armed were twelve in depth, the Thebans fifty. * Alexander the great leading his armie against Clitus, and Glaucias, the way being so narrow, that no more then foure might marche in front, made the depth of his armie a hundred and twenty. * And the souldiers that Xenophon broughtt backe out of Persia, when they purposed to sacke Byzantium, put themselves without commaunde in order of fifty deepe. In the text is fifty deepe, but the margent hath eight: which I take to be the truer reading, because Xenophon saith, the place was faire to sett a battaile, being void of building, and having an even plaine. And it was not the manner of the Gracians to make a Phalange fifty deepe, unless there were extrao'dinarie occasion. * In the battaile of Delos betwixt the Athenians, and Thebans, the Thebans were five and twenty in depth, the Athenians but eight. The same Athenians were eight in depth against the Siracusians. So that the depth of eight was much used among the Gracians. How be it I find not, that they called a file of eight by the name of Lochos. * Cyrus the elder made his files of twelve men, and the leader thereof hee called *ἡνδοκίμοι*, and *δυνακίμοι*, and the file is selfe decas, which in signification albeit it is importen, yet wee must retain the word, as it is used, and not fly to the original of the Etimologie, as I noted before upon other occasion. But Alian maketh his file of sixteen. His reason followeth.

3. For whether they use darts &c.] The file being sixteen in number, the souldiers therein every one having after distance from other three foote, take up in the whole depth forty eight foote, and being doubled to thirty two men, they take up ninety six foote, which amounteth to thirty two yards. That bowes and slings caslie out reache this distance, as I have by etymus before by me alleged, * who saith, they stroke their marke six hundred foote of, which in our account by scores, is ten score. Of the darts a man may rather doubt, which notwithstanding with an exercised arme is sent much further, then thirty two yards. * Lipsius writeth, that a dart was usually cast foure hundred foote, which amounteth to a hundred thirty three yards, or as we in shoting measure it, six score and odd. The reason why Alian placed the light armed be hind we shall see beere after in first place.

The Tactics

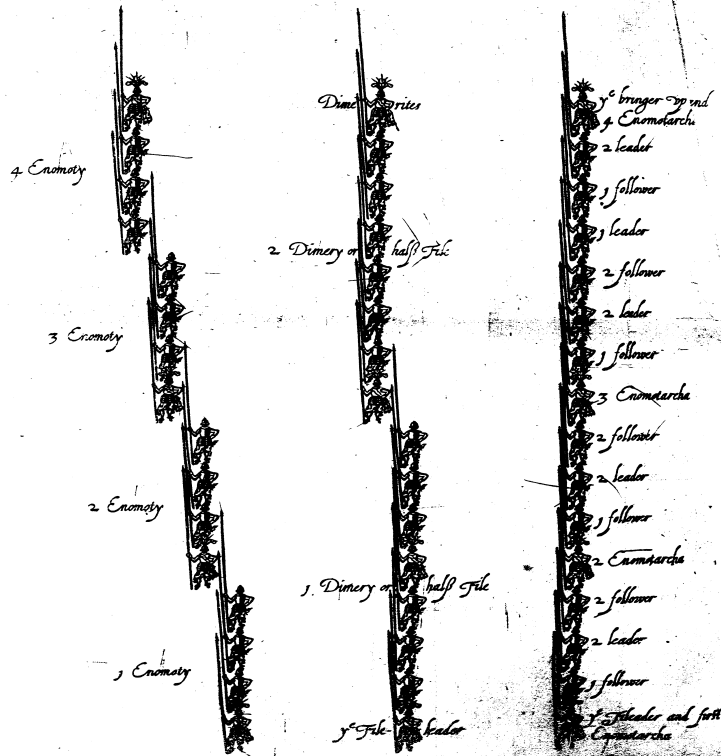
The order and parts of a file or Decury.

CHAP. V.

THE best man of every file is the first in place, and hee, that leadeth the file, who is also called the file-leader, the Commander, & the fore-stander. The last man of the file is called the Rear-Commander, or bringer-up. The whole file it self is termed a *verse*, and a *Decury*, and of some an *Enomoty*. Yet there are, that hold *Enomotia* for the fourth part of a file, and the Commander of an *Enomoty* they call *Enomotarcha*, and two *Enomoties* they take for a *Dimery*, & name the Commander thereof *Dimerites*, so that the half file is said to bee a *Dimery*, and the Commander *Dimerites*. This man is the last of the file. Hee, that standeth next behinde the file-leader, is named a *follower*, and the next after him a *Leader*, and the next after him againe a *follower*. So that the whole file consisteth of *Leaders*, & *followers* placed successiually one after another. * It becometh the file-leader to bee more sufficient, then the rest of the file, and next him the *Leader* of the half-file, or bringer-up. They define a file to bee a Row of followers placed according to their worth successiually after a file-leader.

Notes.

THE best man of every file. Why the file-leader ought to bee the best man of the file many reasons may bee given first because hee commandeth the rest. And as in all other things hee that is to rule, and governe another, ought to have more knowledge, then hee that is commanded, and governed, so is it in matter of warre. Further, as his skill, so his valour, ought to bee most: that his example may encourage and incite the rest. Which is the cause, that other commanders also are placed in front, and in the eye of the souldiers that their valour & forwardnes may breed an honest emulation in the souldiers to doe, as they doe. Besides, the first place is most becoming him, that best deserves, and the more valiant a man is, the more hee desireth to shewe it in the face of the enemy, thereby to winne himself honor, and reputation. Furthermore, hee may doe best service in the front, by entering into the enemies battail, and making way for the rest. Not unlike a sword, whose edge maketh speedy passage into the thing, it cutteth, and draweth after it the rest of the iron, bee it never so blunt. In the front, the ranks of the file leaders give the push to gaine the field. Which reason I thinke lead^d Gorgidas the first institutor of the Theban Hieros Lochos, not to make an entire troupe thereof apart, but to place it man by man in the first rank of the Phalange. Lastly the fight of the file leaders, being the choice of the armie, both for stature, and resolution (for so *Alban* would have them) breeds a terror in the minde of the enemy. Who, seeing such gallants in the front, have cause to imagine that the rest of the armie, which they see not, is like to those they see. And, being never so valiant, they had rather haue to doe with weak, and relenting then stout, and resolute adversaries. As at the battail of Cannas a *Numidial* on horseback, that brought him newes, that the *Consull* had commanded the horse men to alight, and fight on foot, how much rather would I, quoth hee, hee had delivered them bound into my hands. I have heard many hold opinion, that the manner of the *Graecians*, to bring their best men first to fight, is contra-

Cap. 3
The ordering of a File

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ry to the institution of the Romans, who held the Triarij (theire eldest, and best souldiers) in the rear, and brought them not to ioyne, till both the Hastati, and Principes were beaten, or retired. But if wee consider the diuersity of both theire embattailings, wee shall see not great difference, or at least wee shall see, that the reason of placing their best men was not much different. The Gracians in framing theire foure-fold Phalange made in length an even front of a 1024. files. The files were 16. deepe, and the best men therefore in front, because being placed in the midit, or in the reare, there would haue bene no vantage of theire valour, and the Phalange might haue bene broken, before it had come to theire turnes to fight. The Romans contrari-wise, in ordering a Legion, made many maniples, and gaue the front to the Hastati, the middeit to the Principes, the reare to the Triarij. Nowe the Triarij being ordered in the Reare, might at the beginning bee brought to fight in front, if need were; being not need, they kept their place, till their Generalls found it fit to call vpon them. So then this is the difference. The File-leaders of the Gracians had the front, because otherwise in so deep a body, as the Phalange was, they could not haue come to fight: The Triarij might alwayes haue bene employed in front, in flanke, or in the reare, as pleased the Generall. And that the Romans also in theire severall Maniples placed theire best men in front, I cannot doubt. There stood the Centurions, which were the leaders of the Maniples, and in reason were to bee seconded with the best men under theire command. ^a C. Crassus may serue for an example whose being noe Centurion, but an Evocate, in the battaile of Pharsaly betwixt Cesar & Pompey, bidde his Manipulers (they were of the Maniple, which hee once commanded) to followe him, and said hee would make his Generall giue him thanks aliuie, or dead. Yet must I confesse, that the front was not the proper place of the Evocates. But hee chose the front, and held it a place worthy of his valour. It is said of ^b Casiline that, when hee fought with C. Antonius, hee placed in the front of his army, all the chosen Centurions, and Evocates, and besides of common souldiers such, as were best armed. ^c Livy speaking of a fight betwixt the Romans, and the Latines, and describing the forme of the Roman battaile, after hee had limited the place of the Hastati, & Principes, writeth thus of the Triarij. After the ensignes (hee meaneth the Standards of the Legions) nor the Ensignes of Maniples, were ten other Maniples; whereof every one had three Ensignes. The first Ensigne led the Triarij,ould souldiers of tryed valor, the next the Rorarij, not soe well esteemed for strength in either age, or deeds, the third the Accensi, a troupe of left trust, which was the caule, that they were cast in the reare. The Accensi were put in the reare, because there was noe great opinion of theire valor; the Triarij had the front, because they were ould souldiers, and had bene sufficiently tryed. Soe then in dividing of their armie into small bodies, or battailions, the Romans differed from the Gracians: in placing the best men of theire maniples in front, they observed the same manner, that the Gracians did in placing theire file-leaders in the first ranke of the Phalange.

2. A verticall I have translated Richos a verse. The more usuall signification is a some of any thing placed orderly. ^d Soe Xenophon applieth it to trees, which were planted orderly one after another, and ^e Eustathius to the standing of dauncers one after another in d'rib even as our souldiers are placed one after another in file. ^f Iulius Pollux also acknowledgeth, that there were files, and ranks in Choro, that is in daunces vpon the stage. But Suidas saith it was commonly taken for a line, which was read from the left to right hand. And to say the truth a verse, as wee read at this day, and as they read, when *Ælian* wrote this treatise, rather resembleth a ranke then a file, because in a ranke men stand side to side, as words doe being placed in a line. Yet because the word is received by use in that other sense, wee must like wise admitte the same.

^a Cesar de bello civil lib. 1.

^b Sallust. de coniur. Catilinae.

^c Livius decad. 2 lib. 4. pag. 114. A.

^d Xenop. in Oec. 10. C.

^e Suidas in d'rib.

^f Iulius Pollux lib. 4. cap. 10.

^g Suidas in versu, 10. 11. 12.

3. A decury] This in Greeke *Alion* calleth Decania, a word, which in this sense I find in no other Author, then in him, and in Suidas. Xenophon calleth it Decas: for death *Prbicus* and *Arrian*, and likewise *Hefychius*. ^a Leo calleth it decarchian and Aklion.

4. An Enomotie] The word cometh from *omnyni* to swear, not of *omos* a shoulder, as *Robortellus*, and *Patricius* imagine; of whom the first translateth it in late Intergutio, the other in Italian Spalagione, as it were a backing; upon this conceit, I thinke, because in a file the whole number standeth one at the backe of another. ^a Suidas saith: Enomotia is a body militarie amongst the Lacedemonians of 32 men, and is soe called, because they take theire other together, not to forsake the place assigned them in battaile. With whom agreeth the great ^b Etymologicon; and ^c Hefychius likewise, who termeth it a body militarie, that taketh an other and sweareth by the sacrifice, which is offered at such time, as they goe into the field. And surely you shall not finde the word Enomotia applied to other souldiers, then the Lacedemonians, or else to them, that the Lacedemonians commanded: untill it was afterward taken up by the Macedonians. And ^d Julius Pollux expressly noteth, that Moira, and Enomotia, are proper appellations of the Lacedemonians, given to certaine of theire militarie bodies. Albeit both the text bee corrupted in Pollux, having Enomotia for Enomotia; & the interpreter hath worse translated it, reading Enomotia, militarie discipline, & Moira a duty. As the *Lochos* is great, or little, so is the Enomotia. The Lacedemonian Enomotia was 32 men, the *Lochos* being 512. but the file of *Alion* being 16. and the Enomotie noe more, then the fourth part of a file the Enomotie must containe noe more then foure men. One of every of these foure must bee a commander; who is called Enomotarcha, or the commander of that Enomotie. So that in the whole file, consisting of 16. there ought to bee foure Enomotarchas. Where they should stand in the file, is a question. *Patricius* maketh the file-leader the first Enomotarcha, the first man, the second, the ninth man, the third, & the 13 man the fourth, excluding the bringer-up, whom notwithstanding hee acknowledgeth to bee the second man of the file, and in dignitie next to the file-leader. I am of another opinion, and yett allowe the places of the first, fifth, and ninth, but thinke the bringer-up ought to bee the last Enomotarcha: ^e Arrian confirmeth my opinion; who writeth thus: Alexander returning to Babylon, found Prucestes newly come out of Persia, bringing with him 20000. Persians. Then commending the Persians for theire obedience in all things to Prucestes, and Prucestes for his care, and diligence, in ordering them, hee reparted them into bands according to the Macedonian manner. Over every file hee appointed a Macedonian file-leader to command, and next a Macedonian dimarite, and a Decastater, so called of the paye hee had, which was lesse then Dimarites, and more then the common souldiers; then twelue Persians, and last of all the file a Macedonian, who also was a Decastater. So that in the whole file there were foure Macedonians, three, whose pay was more, then the common souldiers, and a file-leader the fourth, and more over 12. Persians. So Arrian. Out of which wordes we may learne first the number of the Macedonian file, which consisted of 12. Persians, and 4. Macedonians, in all 16. the number, that *Alion* requireth in his file. Next, that the Enomotarchs, or commanders of the foure parts of the file, were likewise 4. Lastly that the bringer-up was one of the foure by expresse words of Arrian, which is contrarie to the opinion of *Patricius*, and whereas Arrian termeth the third Enomotarch. Decastateros of the pay, hee receiveth it, it is to bee under stood, that Stater was a piece of coine, of the weight of foure drages of Athens whereof the

Enomotarch

Enomotarch had ten by the month. The dragne was of value seven pence sterling, and the Stater, coneyning foure drages, two shillings and four pence sterling; and ten of them were valued at twenty three shillings and four pence. Which was the pay of the second Enomotarch, and of the bringer-up, as Arrian affirmeth.

5. And the Commander Dimarites] About the Dimarite Arrian, and *Alion*, differ. Suidas leaveth the matter uncertaine, saying the Dimarite is commander from the bringer-up, and giveth a greater pay to the Dimarite, then to the bringer-up. The bringer-up, he saith, was noe more then Decastateros, where as the Dimarite had a greater pay. But Arrian twice in this chapter affirmeth, that the bringer-up was the Dimarite, and addeth hee ought to bee the second man of worth in the file. And that the place of the reare is not much inferior to the front. ^a Cyrus testifies his bringers-up in Xenophon in these words: You have a place saith hee no lesse honorable, then they, that stand in front. For being in the reare, and seeing valiant, and the remisse and backward you incite, & spurre on, likewise to doe as well, as the rest. ^b Leo appointeth two Officers to a file, the file-leader, and the bringer-up, & so maketh the bringer-up the second person of the file. The reare being then the second place of the file, I conceive no reason, why, as the file-leader commandeth the one half of the file, so the bringer-up should not bee the Dimarite, and command the other; and I rather assent to Arrian, that of purpose describeth the particulars of his arte, as hee findeth them set downe in the ancient Tactics, then to Arrian, that, writing the historie of the deede of Alexander, stumbled by chance upon these things their meanings, if wee consider the severall respects of the offices of these Enomotarchs. For the middlemost Enomotarch may bee termed the Dimarite in regard hee standeth in the head of the second half-file, and in doubling the front and some other motions leadeth it: the bringer-up because hee absolutely governeth it, and seeth that directions, given by higher officers, bee executed.

6. It behoveth that the file-leader bee more sufficient] The file-leader and bringers-up ought to bee the most sufficient, because they haue the whole government of the file, the one in the front, the other in the reare. The rest are under them, and to bee called by the names of leaders, and followers. But yett there is a further disposition of the file, which, as I finde it in Leo, I will set downe. His word is found thus: over the sixteen you are to appoint a file-leader (as hee is termed) resolute, and fit for service, and eight of these sixteen, that shall bee found fittest, you shall place in the front, and reare, of the file, foure in the front, namely in the first, second, third, and fourth place, other foure in the reare, in the sixteenth, fifteenth, fourteenth, and thirteenth place, that the front and reare may bee strengthened with foure men a piece. The weaker are to bee placed in the midst of the file. This counsell, or rather precept, of Leo hath this reason. The front, and the reare, are the principall places the enemy commonly giveth upon. The front wee always turne against the enemy, if we can. The reare the enemy seeketh to attache, and by it to discomfesse us, if wee can. The flanks for the most part are secured by the horse, and light armed. For Leo placeth the light armed, and horse in the flanks. See these two places, being most subject to the violence of the enemy, require extraordinary care, and assurance. As for the weakest, which are in the midst, they never come to strike stroke, but after the front, and reare, are broken, in another place hee writeth to this effect: your Contubernies (the souldiers that cabin together) you shall order according to five men, or to ten, or to foure,

or to eight, or to sixteen, as you shall find most convenient, that being bound one to another with mutual acquaintance, they may fight one for another in battaile and bee more valliant against the enemy. But you shall doe more wisely, if when you are to joyn, you place brothers by brothers, & friends by friends. For when hee, that fighteth, hath an entirely beloved friend standing next behind him, hee must of necessity haue himself with more egerneesse for his friends sake. And the other being ashamed not to requite one, that sustaines such danger in his behalfe, will hardly bee brought to forsake his friend so well deseruing, and first betake himselfe to his feete. *The same is the aduise of Onofander, and was much practised in auncient time. The Lochos Hieros, or Holy-band, of the Thebans (whereof I spake before) consisted all of friends, that had bound themselves one to another in friendship. With this Holy-band Pelopidas gaue the first disgracefull overthrow to the Lacedaemonians, that ever they had. Of this band Plutarch writeth, that it was neuer beaten untill the battaile of Cheronæa, when Philip the father of Alexander vanquish the Athenian, and Theban forces both together. After which battaile Philip surueyng the dead bodies, and conning to the place, where these three hundred lay, all close mingled one with another, and strooken through with the Macedonian pikes, hee wondered greatly, and hearing that it was the band of louers, and beloued, wept, and said, evilly may they perish, that suspect any filthines in dedde, or suffering, to haue been practised amongst such men. Cyrus the elder had his Homotimos nourished up together, and Alexander his Hetaitos, whose extraordinarie service appeared in all their battailes.* *Diodorus Siculus writeth of Sesoosis the Egyptian King to this effect: at the birth of Sesoosis his father did a magnificent and royall deed. For gathering together all the children of Ægypt, that were borne the same day, and setting over them some to nourish and governe them, hee gaue the same education, and institution, to them all, conceiving that they, that were brought vp together, & partakers of the same liberty, would become the best affected, and most assured fellow helpers in warre. This was the iudgement of Atiris, the father of Sesoosis, King of Ægypt, in providing assured assistance to his sonne for the conquering of the whole world, which by certaine blinde prophecies was promised him. Now what little trust there is to bee given to men, that are not acquainted one with another, Pompey that great Capitaine of the Romans sheweth in his epistle to Domitius: For men, saith hee, are not quickly to be assembled hether by musters, and if wee had them, you are not ignorant how much they may be relyed vpon, being vnacquainted to fight against ould Legions. Tet hath Leo another mixture in his fles. For hee would haue the ould, and new souldiers put together in one file. Least saith hee, the ould being by themselves alone, proue weake, and of small force, and the yong disorderly, having little experience. For the one, albeit ould, yet are well acquainted with service, the other albeit yong, and valliant, yet are vnskillfull.*

For the Enomoties, dimerie, and file, see the figure.

Joyning of Files.

CHAP. VI.

I Joyning of Files, is when one file is laved flank-wise to another, the Leader of the second file to the Leader of the first, and the follower of the second File-leader to the follower of the first, and so the rest. Every man that ranketh

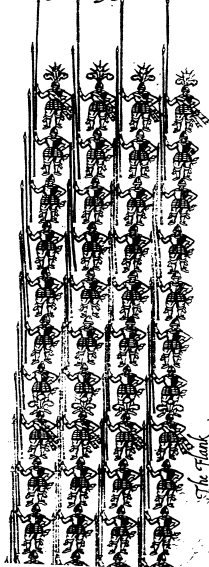
is

1st File

2 Files Joyned



4 Files Joyned



a Plutarch in Pe
loida.
b Plutarch, lib.

c Diod. Sic. lib.
8. 34.

d Cicero ad Aem
iliu lib. 8. cap. 10.

or to eight, or to sixteen, as you shall find most convenient, that being bound one to another with mutuall acquaintance, they may fight one for another in battaile and bee more valiant against the enemy. But you shall doe more wisely, if when you are to joyne, you place brothers by brothers, & friends by friends. For when hee, that fighteth, hath an entirely beloved friend standing next behind him, hee must of necessity hazard himself with more egerneesse for his friends sake. And the other being ashamed not to requite one, that sustaines such danger in his behalfe, will hardly bee brought to forsake his friend so well deseruing, and first betake himselfe to his feete. *The same is the advise of Onofander, and was much practised in ancient time. The Lochos Hieros, or Holy-band, of the Thebans (whereof I spake before) consisted all of friends, that had bound themselves one to another in friendship. With this Holy-band, Pelopidas gave the first disgracefull overthrow to the Lacedaemonians, that ever they had. Of this band, Plutarch writeth, that it was never beaten untill the battaile of Cheronæa, when Philip the father of Alexander vanquisheth the Athenian, and Theban forces both together.* After which battaile Philip surueying the dead bodies, and coming to the place, where these three hundred lay, all close mingled one with another, and trooken through with the Macedonian pikes, hee wondered greatly, and hearing that it was the band of louers, and beloued, wept, and said, evilly may they perish, that suspect any fithines in decde, or suffering, to haue been practised amongst such men. *Cyrus the elder had his Homotimos nourished up together, and Alexander his Hetaitos, whose extraordinary service appeared in all their battailes.* *Diodorus Siculus writeth of Sesoosis the Egyptian King to this effect: at the birth of Sesoosis his father did a magnificent and royall deed. For gathering together all the children of Egypt, that were borne the same day, and setting over them some to nourish and governe them, hee gaue the same education, and institution, to them all, conceiving that they, that were brought vp together, & partakers of the same liberty, would become the best affected, and most assured fellow helpers in warre. This was the iudgement of Myris, the father of Sesoosis, King of Egypt, in providing assured assistance to his sonne for the conquering of the whole world, which by certaine kinde prophecies was promised him. Now what little trust there is to bee given to men, that are not acquainted one with another, Pompey that great Capitaine of the Romans, sheweth in his epistle to Domitius: For men, saith hee, are not quickly to be assembled hether by musters, and if wee had them, you are not ignorant how much they may be relyed vpon, being vnacquainted to fight against ould Legions. Yet hath Leo another mixture in his files. For hee would haue the ould, and new souldiers put together in one file. Least saith hee, the ould being by themselves alone, proue weak, and of small force, and the yong disorderly, having little experience. For the one, albeit ould, yet are well acquainted with service, the other albeit young, and valiant, yet are vnskillfull.*

For the Enomoties, dimerie, and file, see the figure.

Joyning of Files.

CHAP. VI.

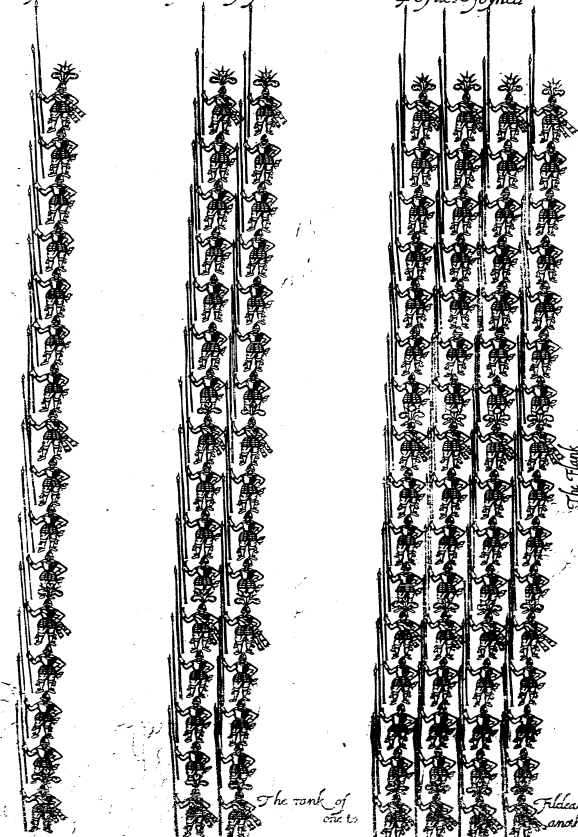
I Joyning of Files, is when one file is layed flank-wise to another, the Leader of the second file to the Leader of the first, and the follower of the second File-leader to the follower of the first, and so the rest. Every man that ranketh

is

1st file

2^d Files Joyned

3^d Files Joyned



The flank

The rank of one

File-leaders being joyned another

The Front

is called *Parastates*, as for example the *Leader* of the second file, to the *Leader* of the first, and so their next *followers*, and the rest. As often then, as the second file, the third, the fourth, and so the rest are layd *flank-wise* to the first, it is named *Joyning of files*.

Notes.

ⁱ **I**oyning of files is] *A file of it self will worke little effect against an enemy. For what can a man alone in front doe? Cyrus in Xenophon wiseth, that, where as the Egyptians stood a hundred in depth, they had beene in depth a thousand, for soe, saith hee, wee should have the severall hands to fight against. The ranke bringeth the multitude of hands to fight. And it is held, that the more hands are with conveniency brought to fight, the more is his advantage, that bringeth them. This is done by joyning files together, out of which joyning ranks spring, and ranks the more they increase, and extend themselves in length, the more hands are ready to encounter the enemy. Now, as it was said in the former chapter, that files consisted of leaders, and followers, from the first to the last. So is it in this chapter said, that ranks consist of side-men from one end of the length of the Phalange to the other: Fewe, or many men, placed side to side in a right line make a ranke; as in two, or three files joyned together, there are sixteen ranks of two, or three men in a ranke. And the two or three file-leaders make the first ranke, their followers the next, and soe the rest untill you come to the sixteenth. The like falleth out in more files. ^b Virbicius saith, that the file-leaders make the front (as they terme it) of the Phalange, which they call also the first ranke. And further, hee saith, they, that runne in an even line betwixt the two wings, the right, and the left, are said to be Parastatai, or sidemen. Like-wise: the last ranke is called Oura, or the reare, and the commander Ouragos, the bringer. So Virbicius agreeing with Ælian. Now, out of these two chapters, is a cleare distinction of the names of shouldiers, that by reason of their posture, or place, in battaile make the diversitie of files, and ranks. They, that make files are Protostatai, first standers; & Epistatai, after-standers; which are by us commonly called Leaders, and followers. For the two saith Ælian make the file from the beginning to the end. Parastatai side-standers, or, as wee terme them, sidemen, make the ranks. And if you measure the length of the Phalange, you doe it by number of men in the ranke, if the depth by number of men in the file.*

^a Xenop. Cyrop. lib. i. cap. 10.

^b Virbicius, magna in hoc verbo significat.

Of a Phalange, the length, and depth thereof: of ranking, and flanging; the division of the Phalange into wings: the place of the armed foote, of the light-armed, and of the Horse.

CHAP. VII.

THE whole bodie of the multitude of files is termed a *Phalange*: whose length is the first ranke of file-leaders, and is named, the *front*, the *face*, the *edge* of the battaile, the *ranke*, the *mouth*, the *Commanders*, the *fore-standers*, & the *head of the files*.

As much of the *Phalange*, as stretcheth backward from the *front* to the *reare*, is named the *depth*. The bearing straight forth of *side-men* in length, whe-

ther

ther they be Leaders, or followers, is ranking. And the standing of Leaders and followers directlie in a line in depth, is filing.

A Phalange is divided into two whole partes beginning at the middle section of the front, and houlding on cleane through to the vttermost parte of the depth, whereof the one half is called the *right wing*, and head, the other half the *left wing*, and *tail*. The two fold section it self, that divideth the length, hath the name of the *Navell*, and the *Mouth*. The *Light-armed* are placed after the *Phalange* of the *Armed*, and behind them the *Horse*. Yet if occasion require, both *light-armed*, and *Horse* are otherwife disposed, as after in this discourt will appaere.

Notes,

THE whole body of multitude of files is termed a Phalange] *Joining of files makes ranks, and a sufficient number of files, and ranks together, make a body, which is called a Phalange. For that name is given to any entire body of an indifferent greatnesse, compacted, and united for fight. Hefychius deriveth the originall of the word Apo tou pelas allos inai; from the standing of the soldiers in battailenere one to another, Suidas in the same sence, albeit hee differ a little in words, saith, the Phalanges are so called apo tou pelafai anchi, of approaching one neere to an other. The great Etymologicon goeth yet a little further, and saith, that Phalanges are as it were Palanges para to pelas kai eggys cinai, as it were Pelangys. These are the conjectures about the originall of the name. Which of them is truest, is not greatly to the purpose. It is enough to understand, in what sence the word Phalange is commonly taken amongst Tactick writers, who, as I said, in a generall signification call any great body of armed gathered together, and united for fight, a Phalange. Soe^a Caesar nameth the battaile of the Heluctians, into which they cast themselves, when they fought against him, and likewise the battaile of Ariovistus, a Phalange. So speaketh^b Xenophon of the Platium, or square hollow battaile, into which the Gracians, that went with Cyrus the younger into Persia, fashioned themselves at their returne out of Persia. And the same^c Xenophon saith, the horse of the Gracians, when they were to encounter the Persians, ordered themselves foure in depth, in forme of a Phalange. And^d Arrian, that the Persians at the River Granicus were ordered in a long Phalange, and^e Xenophon againe discoursing how Iphicrates exercised his naute, when hee expected to fight with the Lacedemonians, saith, hee sometimes lead in a wing (that is in a large depth) sometimes in forme of a Phalange, in a broad front. The first inventor of the Phalange is thought to be Pan the generall of Bacchus his armie. Polyenus saith: Pan was the commaunder of Bacchus his armie. This man was the first that invented the order of a battaile, called it a Phalange, and parted it into the Right, and left wing. For which cause Poets faine, that Pan carrieth two hornes vpon his head, Besides hee was the first, that by slight, and cunning cast a feare vpon his enemies. For when Bacchus, incamping in a hollow forest, was advertised by his spies, that an infinite number of enemies were lodged one the further side, hee began to be affraide. But not Pan: who commanded the same night the armie of Bacchus to giue as great a shout, as they could. The Rocks and hollownesse of the forest rendered it againe double to the enemy, & made shew of a greater armie, then Bacchus had. Where with the enemy falling into a fearefull fourth with, in honour of this stratageme wee saine, that Echo is Pans loue: & the causelesse night-fears, which fall vpon Armies, were attributed to a Pan.*

So

^a Caesar de bell. gall. lib. I.

^b Xenoph. de exp. Cyr. lib. p. 100.

^c Xenoph. hist. grec. lib. 2. cap. 1.

^d Arrian lib. 1.

^e Xenoph. hist. grec. lib. 1. c. 4.

^f Polyest. lib. 1. c. 1.

^g Polyest. lib. 1. c. 1.

^h Polyest. lib. 1. c. 1.

ⁱ Polyest. lib. 1. c. 1.

^j Polyest. lib. 1. c. 1.

^k Polyest. lib. 1. c. 1.

^l Polyest. lib. 1. c. 1.

^m Polyest. lib. 1. c. 1.

ⁿ Polyest. lib. 1. c. 1.

^o Polyest. lib. 1. c. 1.

^p Polyest. lib. 1. c. 1.

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^x Polyest. lib. 1. c. 1.

^y Polyest. lib. 1. c. 1.

^z Polyest. lib. 1. c. 1.

So farre Polyenus about the inventor of the Phalange. The number of the Phalange is not alwayes one. It may consist of ten thousand, twenty five thousand, or as many, as you list. Antigonus the King of Macedonia had his Phalange of ten thousand, as you list. Ptolemaeus King of Egypt, of twenty five thousand. The ten thousand Gracians, that went with Cyrus into Persia are called a Phalange. What number the Heluctians, and Ariovistus, had in their Phalange, is not precise (set downe by Caesar. Tet is semeth by Caesar, that the most parte of the fighting multitude of the Heluctians cast themselves into a Phalange, and those of Ariovistus likewise. But Aliens Phalange is restrained to a certaine number, as the next following Chapter will teach.

2 The length whereof] The length of the Phalange is to be accounted by the ranke not by the file. The file is but sixteen men deep. The ranke from the point of one wing to the point of the other consisteth a thousand, and twenty foure men in Aliens Phalange. So that the files being short in comparison of the ranke, it is reason, that the length of the Phalange be measured according to the ranke, not to the file. Suidas agreeth with Eliau saying, that the length of the Phalange is the first Syntagma (the first ranke) of file leaders, which is ordered in a right line, stretching from one wing to another, and is called the face, and the mouth, and the front, & the edge, and the first filing, and the first standers of the battaile. The next rowe, being parallel to this, is called the second ranke, and the third, the third ranke, and soe the rest. The length is termed in Greeke Mecos, to which is opposed the depth, which is named Bathos. Neither is there in true account any other dimensions in a Phalange, besides the length, and the depth, which are in this chapter mentioned by Eliau. Other names are given in Greeke writers sometimes, but they signifie either the one, or the other.

3 Is named the depth] As the length runneth along by front from one wing to another, so the depth beareth backward from the front to the rear. The depth is properly called Bathos, as I said. And Batiera Phalang, is a deepe Phalange. And Arrian saith, Alexander ordered his Phalange es Bathos, in depth. Polybius, that the Romans made their battaile much shorter then before, but much deeper, Bathyteran. And as it is called Bathos, for the most part, so it is by Leo called also Pachos. For the depth of a file is by him termed depth, or Thickness, Bathos etoi Pachos, in two severall chapters of his Tactics; not in respect of the file it self, which is no more then a long line, as it were, and carrieth neither Thickness nor breadth, but in respect of the Phalange, the depth whereof is measured by the file. And in the fourth, the twelfth, and fourteenth chapters hee termeth the depth of the Phalange it self (Thickness) Pachos alone with out adding Bathos, shewing thereby, that Pachos also signifieth the dimension of the Phalange from the front to the rear. But where some are of opinion, that Platos, breadth, ought to be read in those places in stead of Pachos, Thickness, they persuade mee not to bee of their mind. For Eliau & after cap. 104. himself giueth an Attenuation, or Thinning, (which hee calleth Lipyrimos) to the Phalange: and that cannot bee under stood, unless there were in it a kind of thickness before. And to make it more plaine, hee saith, that this Leptyrimos is, when the depth of the Phalange is gathered up and from sixteen men it becometh a less number. So that the Thickness of the Phalange is the full sixteen, which is also the depth, and making of it Thinner is to lessen the depth. To a Place Platos is fittedly ascribed, a Place being onely superficies, which consisteth of longitude and latitude. So Platonius speaking of a vally, wherein an ambush was layd to entrap Alexander, saith, the length stretched farre out, but the breadth, Platos, was narrowed to few, far in Polybius long. The name of Platos is likewise given to a place by Polybius. But to say the truth

E

truth

^a Polyb. lib. 2. 170. d.

^b Polyb. lib. 2. 408. c.

^c Polyen lib. 2. in Eliaodo. 5. p.

^d Caesar de bell. gall. lib. 1.

^e Suidas in Mecos.

^f Suidas in Mecos.

^g Suidas in Mecos.

^h Suidas in Mecos.

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^x Suidas in Mecos.

^y Suidas in Mecos.

^z Suidas in Mecos.

truth Platos in a Phalange rather significeth the length, then the depth, as appeareth by *Asian* after in the foure and fourth chapter. And *Leo* calleth the front of the Phalange Platos, and when hee would have the front enlarged, or doubled, hee giveth this word of direction *Platynon pros ta amphiotera mere*, enlarge the front on both sides.

4. The right wing] That which in the English tongue is called a wing, is termed in Greeke *Keras* a borne. Wee in our warres of ancient time divided our armies into three parts, The vantage, the bataille, and the reare-ward: and, when wee came to fight, set them for the most part in an even front, the bataille in the middle, on the right hand, the vantage-ward, which was called the right wing, on the left, the reare-ward which was called the left-wing. Properly enough for our em-battailing. For the bataille is, as it were, the body, and the vantage-ward, and reare-ward, are the wings, which in a manner stick out from the body, and where-by the body is supported: that, that wee call wings, the Grecians, and Romans called horns in the bataille. The word *Keras* significeth a point bearing out from the heights, or ends, of any thing. It is used for the toppe of Rocks, and for promontories, and such like; And in a Phalange it properly significeth the two points (the right and the left) of the wings. The English word wing I am faine to retain, because it is familiar, and in use. *Asian* heere will have the wings to stretch out from the middle section to either point (the right and left) of the Phalange, under which appellation must fall to the right wing the whole space, that beginneth at the middle interval, and runneth along to the corner of the bataille on the right hand, to the left, all that is comprehended betwixt the same space, and the left corner of the bataille.

5. The two-fold section] In Greeke it is named *Dichotomia*: because it parteth, and divideth the Phalange into two even parts, beginning at the front, and stretching out to the reare. And *Asian* in the tenth chapter of this booke nameth it *Apotome*. But heere hee speaketh of no more intervals, or partitions, of the Phalange, then of this one in the midst. I would thinke there should be more. *Onofander* saith: let there be certaine intervals in your bataille, that if your enemy advance, you light-armed after they have spent their misse weapons, and before the Phalanges joyne, may retire leasurely in the intervalls, and without disorder come behinde to the reare. For it is not safe for them in retreating to fetch a compass about the whole armie, or to turne in againe on the outside of the wings. For the enemy, hasting to come to hands, would easily prevent, and intercept, them in the midst: so that they neither should be able to breake through the armed, already clofed for fight, and falling vpon their owne weapons, they must needs disorder their owne people, every man after other seeking to finde a way through them to escape the danger hee is in. *I have much onfender*, from whom wee may learne, both that theirs ought to be more sections in the Phalange, then one, and that the institution of them had this chief end, to receive the light-armed in their spaces, after they had skirmished with the enemy, and were by them forced to retire. I may adde, that *Asian* placing the light-armed in the reare of the Phalange if you give but one section unto it, it will be as hard for them, to advance, and frue, before the front, as it will be to retreat after their service done. It seemeth, that *Leo* giveth three intervals to the Phalange of the ancient Tacticks. He saith: they opposed the bodies of the armed against the enemy, and divided them into foure parts, the right, and left, and the middle-right, and middle-left parte. Making so many parts, the parts must be distinguished (as I collect) by intervals, which ought to be one after

after the first body of the right-wing, another after the second, which is the middle section, the third after the third. And this Third section is bounded with the fourth body, which maketh the point of the left-wing. For if the Phalange were whole, and entire, without more intervalls then one, how could there be foure parts? For esteeming them by Phalangarchies, without leaving spaces between, it could not be saide, there were but foure parts of the Phalange, considering, that as well the Merarchies, Chiliarchies, Pentecostarchies, Syntagmarches, as parts of it, as the Phalangarchies. But being distinguished by partition of intervalls, the foure Phalangarchies become foure parts, namely the right, left, middle-right and middle-left: as *Leo* heere termeth them. The same *Leo* speaketh after more plainly, enjoining his general to separate, and disjoine *Diachorizein* the whole number of his armie into foure parts. For, as *Choris* significeth apart or severed, so *Diachorizo*, being derived from it, significeth to put asunder, or seise apart. *Suidas* is yet a little more cleare. A Phalangarchie, saith he, is two Merarchies of foure thousand and ninety six men. This as some saye is the section, *Apotome* of the wing, as other, it is a *Meror*. Of ancient time it was called *Sirasegia*, and the commander *Sirasegos*, but now hee is termed *Phalangarches*. *Suidas* maketh the wing to have a partition or section, and saith, some call a Phalangarchie by the name of this section. Before wee heard out of *Asian*, that the wing (right or left) did stretch out from the middle section to the outward most point of the bataille on either side. And as the middle section divideth the Phalange in two parts, which are called wings, so this section (spoken of by *Suidas*) being in the midst of the wing divideth the wing into two parts. To call a Phalangarchie (which is a body consisting of foure thousand and ninety six men) a section, is, I confesse, an unproper speech, but tolerable notwithstanding, considering that the whole foure-fold Phalange is composed of the foure Phalangarchies, and has the section of the right-wing beginneth as the left hand file, or inward point of the right hand Phalangarchie, and endeth as the right hand file of the second Phalangarchie. And we are not to expect the same exactness of speech from *Soldiers*, that is common to men skillfull in the liberal sciences. *Soldiers*, that profess action, have their end, if they be understood of those, they command. Attitudes are contemned, that close not the precepts of their arts with elegant, fit, and exact termes. Seeing then the beginning of the section of the wing is at the Banke of the first Phalangarchie on either side of the Phalange, wee may after a sort terme the Phalangarchie a section of the wing, because it boundeth the section. At least by this place of *Suidas* wee may gather, that there was an intervall in either wing, which in reason ought to be in the midst of the wing, and to lie betwixt the two Phalangarchies. For so many there are in one wing. *Polybius* telleth of *Philip* when, that, fighting against *Machanides* the Tyrant of Lacedaemon, after hee had placed the light-armed, the Lanciers, and Infantry inly in one front, hee added in the same right line the Phalange distinguished into bodies according to Merarchies and divided by severall distances. I translate *Spreidron* distinguished into bodies, because *Speira* significeth a military body amongst the Grecians, and is by the Grecians, that wrote the Roman histories, used sometime for a Legion, and sometime for a Cohort. And it seemeth that *Spreidron* is heere by *Polybius* put in the same sense, that *Eis Speiran* is by *Plutarch*: who mentioning the reformation touching affaires military, which the same *Philopemen* brought in amongst the *Achaians*, writeth thus: their manner and forme of embattailing was not visually parcelled out *Eis Speiran*, that is (as I interpret it) in severall bodies, but using a Phalange,

Phalange, which had neither pretension of pikes, nor closing of targets in front (as the Macedonian manner is) they were easily foiled, and broken, by the enemy. The meaning of Phalaris (as I conceive) that the Achaians in former times used to order their Phalange in a continued length without intervalls which Philopamen reformed, and taught them to make divisions by intervalls; And the practise of Philopamen is the best interpreter of his owne counsell to the Achaians. This practise Polybius setteth downe, to bee the division of his Phalange Kata tele speiredon or diastemasi into bodies distinguished by intervalls according to Merarchies. Polybius also, to shewe, what bodies they were, vseth the word Tele, which I translate, Merarchies, having my warrant out of ^a *Alian*: who saith a Merarchie consisteth of two Chiliarchies, and containeth two thousand and forty eight men, and a hundred and twenty foure files; and addeth, that it is of some called a Telos, and the leader a Telarch. A man may doubt seeing Philopamen make an intervall betwixt every Merarchie, whether hee made seven divisions, or no: For in *Alians* Phalange there are eight Merarchies, betwixt every of which if a distance were, there must needs arise seven intervalls. To cleare this doubt wee must understand, that the Phalanges of the Gracians were not alwaies of the same number, as I noted before. *Alians*, and the Macedonian Phalange, consisted of sixteen thousand and odd. Antigonus had but ten thousand. Demetrius eleven thousand. Other had more, the Lacedaemonians lesse, and likewise the Gracians for the most part. And as seemeth, the Phalange of Philopamen was no more, then eight thousand, and odd, in which number there are but foure Merarchies. As *Alians* Phalange comprehending sixteen thousand and odd, wherein are foure Phalangarchies, hath likewise three divisions by Phalangarchies. And yet in this Phalange of Philopamen, if you account the file to have but eight men (as the most Gracians used in their file to have) these foure Merarchies will possesse (as much ground in front, as the Phalangarchies of *Alians* Phalange doe, the file being sixteen. Neither is it new to figure out the bodies greater, or lesse, according to the number of the Phalange. Leo commandeth his Generall, when the number will not reach to sixteen thousand (the number of the old Phalange) to bould norwithstanding sixteen men in a file, and to divide his Phalange into foure equal parts by intervalls, excepting some few, which hee would have reserved for other uses. To conclude *Alian* him self seemeth to acknowledge more sections, then one, when in the tenth Chapter of this booke he speaketh of the middle section mese apotome. For this word middle being a relative, can not bee understood without two other at least, which are placed on either side. And all the figures, that I have seen, of a fourfold Phalange allowe three sections, and no more, that is to say, one in the middle, and the other two in the wings. What the distance and dimension of these sections ought to bee, I finde not set downe. But, if I might have leave to conjecture, I would thinke, they ought to bee large enough for a troupe of horse, framed wedge-wise, after the Macedonian manner, to passe through, the last ranke whereof being fifteen (as appeareth in the twenty chapter of this booke) and the horse placed in the rear of the light-armed it is needfull, if upon any occasion they were to bee drawn through to serve in the front, the distance of the section should bee sufficient to give them passage without disorder. And I am the rather confirmed in this opinion, because I see the intervalls betwixt the Roman maniples so proportioned, that the Principes might passe through those of the Hastati, and the Triarii through those of the Principes. But I proportioned out the intervalls to the horse, not to the light-armed, for that the light-armed may bee divided into severall bodies without inconvenience, but any breaking of the horse.

b *Leo* sayeth
that 16000.

horse-wedge breedeth a confusion in the whole troupe. Yet where a troupe of horse may finde way, there may a Centurie, or Colours, of light-armed finde also way.

6 The light-armed are placed after] ^a The light-armed were diversly placed, sometimes before the front of the Phalange, which kind of placing is afterwards called Prataxis, sometimes on the wings, and it is called Hypotaxis, sometimes betwixt the files of the armed fronsing in a right line with them, and it is called Entaxis, sometimes in the rear after the Phalange, which was called Epitaxis. All these are spoken of by *Alian* hereafter in this booke. ^b There is another kinde of placing the light-armed, when they are throwne into the midst of the battaile, being hollowed for that, and other purposes. Hereof *Alian* likewise treateth in this booke hereafter. And albeit the most usuall embattailing of them hath bene in the wings, yet the bestowing in the rear according to *Alians* mind hath also advantages. First it concealeth their number, which because they are shadowed with the pikes standing before, can hardly bee discerned. Then it is easie from the rear to drawe them to any place of service without disorder, bee it before, on the wings, or behind the rear. Further, it will not bee easie for the enemies horse to charge them, the armed standing before for a sure defence. Lastly, from the rear they shall bee able at all times to annoy the enemy, before the battaile joynes, as soone as the battaile joynes, and all the time of fight. Neither doth this manner of embattailing want examples of the old historie of the Gracians. The embattailing of Cyrus the elders armie, in Xenophon, hath the light-armed in the rear. I will set downe the effect of Cyrus words at large because they containe the ordering of an armie to fight according to the judgement of Xenophon. Cyrus then being to trye a battaile with Cræsus thus directh his Commanders: you, saith hee, Araptes take your place in the right wing, as you now doe, and you the other Myriarches, as you are accustomed. For when the fight is once a foote, noe Chariot may change horses, and command the Taxiarches, and file-leaders, to order their files every one divided in two parts Phalange-wise, that is each fall fronting one with another in a right line. A file containeth fourean twenty men. Then saide one of the Myriarches, doe you thinke Sir, that wee shall bee able, in this order, to encounter so deep a Phalange, as the enemies? Cyrus answered, the Phalanges that are deeper, then may with their armes reach the enemy, are they fitt thinke you either to annoy the enemy, or profite their friends? For my part I could wish those, that are ranged too in depth, to bee in depth a thousand. For so should wee have the fewer to fight with all. The number, that I give for the depth of the Phalange, I doubt not, but will entirely serve for use, and maintaine a joynt fight in every part. The Darters I will place after the armed, and after the darters the Archers. For who will sett them in front, that confesse themselves vnable to maintaine a fight hand to hand? Howe then will they hold their ground, if they bee sett before the armed; but being in the rear, some with darts, other with arrows, sent over the heads of the armed, will greatly endamage the enemy. And it is cleere, that wherewithall soever an enemy is endamaged, with the same a mans owne side is eased, and relieved. You therefore order your files, as I have appointed. As for the captains of the Targetiers I will have them, and their files, stand likewise next the armed in the rear, and after them the Archers. And you the chiefe Commander of the Rear

E 3 enjoyne

enjoyne the other reare Commanders every man to haue an eye to those vnder him, that they doe their duties. And let them sharply threaten the negligent, and in case any man treasonably forsake his place, punish him with death. For it is the worke of Commanders both with word, and deed, to encourage those, they command, & to make the cowards more afraid of them, then of the enemy. This is your charge, but you Euphratas, that command over the Engines, see that the beasts, that draw the Engines, and Turrets, followe the Phalange as neere, as may bee. And you Daouchus, that haue the charge of the baggage, come with your manie next after the Turrets, and let your Sericants scuerely punish them, that hast to much before or come to slowly after. And you Carduchus, that rule the wagons, wherein the women are, order them next the baggage. For all these, comming in the reare, will both breede an opinion of multitude, and giue vs meane to lay an ambush, and will force the enemy, purposing to encompass vs, to fetch a larger compass, which the larger it is, for much the weaker must bee. And you Artabasus, and Artagerias, each of you leade next after these, the 1000. foote you commande a peece. And you Phranuchus, and Afadatas, order the Charioties of horse you commande not with the Phalange, but set them by themselves apart behind the wagons; and when you haue done it, repaire to vs with therest of the commanders. But you are to bee in a readinesse, as if you were first to fight. And you the commanders of the Camel-riders place your selues after the wagons, and doe what Artagerias shall bidde you. And you the Commanders of the Chariots, after lots are cast, let them, whose lotte it is, range himself, and his 100. Chariots, before the Phalange; the other two hundred, one of them is to follow the Phalange on the right side, wing-wise, the other on the left. So farre Cyrus. I haue rehearsed the words at large, principally to shewe that the light-armed in ancient time were placed sometimes behinde the Phalange, and yet further also, to represent the manner of embattailing an armie, which was then vsuall. For heere haue you set downe the place of the Myriarches, & of the other commanders, which was in front, then the place of the pikes, of the light-armed, of the reare commanders, of the Engines, of the baggage, of the wagons, wherein the women were, of the guards for the baggage, both horse, and foote, of the Camels, and of the Chariots. And albeit many of these particulars agree not with our manner at this day (for we haue neither Engines, nor Camels, nor Chariots, nor lings, nor darts, nor arrows) yet is the reason of warre alike in all, and in our placing also the finesse of seruice principally to bee respected. The place of the horse is heere omitted by Xenophon, which may be supplied out of the seventh booke, where Chrysanthus General of the horse is said to stand on the right wing of the Phalange with half the horse. Hydaspas on the left with the other half. But to returne to the placing of the light-armed, the same Xenophon testifieth, that it was the Egyptian manner to order their light-armed behinde, & that in the battaile betwixt Cyrus, and Crasus, the Egyptian archers, and darters, were with drawne swordes compelled by the reare-commanders to shoote, and cast their darts. Thrasibulus in his fight against the thirty Tyrants set his armed in front, and in the reare his targetiers, and darters, without armor, and those that cast bones. And it seemeth by the words of Thrasibulus to his owne side, that the Tyrants did the like: The Tyrants, saith hee, haue brought vs to a place, in which by reason of the steepnesse they must ascend, and can neither cast bone, nor dart, over the heads of their owne people, that are embattailed before. Where wee contrarywise, whether wee throwe jaucelins, or darts, or stones, shall easily reache, & wound many

a Xenoph. Cyrop.
lib. 7. c. 12. C. 18.
p. 175. C.

b Xenoph. Cyrop.
lib. 7. c. 12. C. 18.
p. 175. C.

c Xenoph. Hist.
grec. l. 4. c. 7. 3. d.
p. 175. C.

d Xenoph. Hist.
grec. lib. 4. c. 7. 3. d.
p. 175. C.

many of them. The stones and darts of the light-armed were to flye over the fronts of the battaile, and that could not bee unless the light-armed were placed behinde. I will adde one example onely out of Plutarch to shew the seruice of the light-armed in the reare. A Plutarch discoursing of the battaile fought betwixt Sylla, and Archelaus, the General of Mithridates, at Cheronas, bath thus: Afterwards the foote forces came to joyne, the Barbarians holding out, and charging their long pikes, and endeavouring with locking their targets close together, to maintaine the order, and closenes of their Phalange: The Romans on the other side, casting away their darts, and drawing their swordes: pure by the enemies pikes in choler, to the end they might come quickly vp to them. For they espied, opposed against them in front 15000. of the enemies slaues, that were enfranchised by Proclamation of the Kings generalls: & enrolled amongst the armed. And when the Roman Armed could hardly breake them; by reason of their depth, and fast knitting together; and of their bouldnes in daring (contrary to the nature of slaues) to abide the danger of the encounter, the arrows, and darts cast in abundance from the Reare, made them shewe their backs, and fall in a rout. Wee finde heere, that the light-armed from the reare effected that, which the Armed could not. These slaues endured the shooke, and could not bee broken by the armed, and yet were defeated with Arrows, and darts, from the Reare: Nowe for the distance that should bee betwixt the bodies of the light-armed, and betwixt them, and the reare of the armed, Elian saith nothing: I make noe doubt, but there ought to bee as great (if not greater) as in the sections of the armed. For wee must understand, that the sections, that served to sever the Phalangarchies one from another, must runne through the light-armed in depth to the reare. And by them are the Epixenagies to bee deuided a sunder, as the Phalangarchies are: with Epixenagies answer the Phalangarchies for number of files, albeit not in number of men. Likewise there ought to bee, a greater space in ranke, and file, then the armed had. For the handling of misse weapons, require more liberty of place, then the managing of a pike, or sword. A dart can not bee sent for cible without running two, or three, stoppes in the delivery of it. A sling being throwne, and circled about the head, before the stone, or bullet, can bee forced out to any purpose, will not suffer a neere stander by. In bones, and arrows, is the like reason, if they be used as they ought. Besides the light-armed in their fight are tied to noe certainty of order, or ground, but fight disorderly: See that the more grounds they haue, the fitter they are for seruice. In which respect a large interuall croswise betwixt the armed, and them, should serue to purpose: in hauing liberty for their motion forward, and backward, as occasion should require.

7 And behinde the Horse: I haue not read in any greck historie, that the horse-men in a set battell, haue beene ranged behinde the light-armed. The vsuall manner was to place them in the wings. See did Alexander before hee passed the River Granicus: see at Issos, see at Gangamela: See did Antigonus, against Eumenes, and Eumenes against Antigonus: See Ptolemee against Demetrius, and Demetrius against Ptolemee: and in briefe all the Macedonians, and the Gracians, before the Macedonians were accounted off for master of armes: unless some speciall cause moued an alteration. And, as I shewed out of Xenophon, before all their times. b Cyrus albit, hee set the light Armed in the reare, notwithstanding hee bestowed the horse in the wings: Alexander hauing passed the River Ister as long as hee marched in the corne land, placed his horse behinde his Phalange, when hee entered the Champeigne, hee set them on the right wing: and lastly cast his Phalange in to a Plafum: and ordered his horse before. In the Corne land, they followed (for feare of an Ambushe) In the Champeigne they marched on the

a Plut. in Sylla.

b Lucan. 4. 5. 6.
c Arrian lib. 1. 15.
d Arrian lib. 1. 15.
e Curt. lib. 4. 6. 1.
f Arrian lib. 1. 15. 1.
g Arrian lib. 1. 15. 1.
h Diod. Sicul. lib. 19. 41. 5.
i Diod. Sicul. lib. 19. 41. 5.
j Xenoph. Cyrop. lib. 7. c. 12. C. 18.
k Arrian lib. 1. 15. 1.
l D. E.

right wing, because on the left, the Phalanx was secured by the River; before the Phalanx, that, being over-laid with the multitude of the enemy, they might have a sure retreat to the foot. The same Alexander, when he was to fight the Battle of Issus with Darius, as long as he was in the streights, marshalled his horse after his foot. But in marching forward, coming to open ground, when he might give full length to his Phalanx, he placed his horse on both the wings. But the reason of sitting them behind was in the streights of the place: and he being incertain how near the enemy lay, was loath to put them to hazard, before they had liberty of ground to order themselves, and might have assistance of the foot. For otherwise it was an ordinary matter in marching (as it is the manner also at this day) to dispose the horse half behind, and half before. I will content myself with one example. When Agagilanus returning out of Asia, passed through Theffalie, the Theffalians, allies of the Thebans, followed him, and sought to endamage his armie to their uttermost. Hee had before disposed his march into a Phalium, with the horse half in front, and half behind, now when the Theffalians ceased not to molest him, by falling upon his reare, hee sent to the reare all the horse of the vanguard, excepting those, that attended his person. Either party prepared them selves to fight. The Theffalians holding it not sure with horse alone to encounter armed foot: Turning about their faces, began leisurely to retire, and the Lacedaemonians slowly to followe. Agagilanus, perceiving the error of both, sent the best of his horse, that were about him, commanding them to signifie to the rest, that they together should goe, and charge the Theffalians with all speede, and give noe respite to them, to turne their faces. The Theffalians contrary to their expectation being hottly charged, some fled, other some turned about towards the enemy, other some endeavouring to turne, were surprised by their enemies, that by that time were come vp to their flanke. Nowe for the reason of Alians placing the Horse in the reare, I have no more to say, then, that from thence they might bee some drawn to all places, front, flanke, or where soever the enemy is like to distresse. For it hath bene the foresight, of all generals to fashion their battails according to the figure the enemy hath before chosen. Examples are so plentifull, I neede not allage many. Onely I will remember one latine story of fighting horse in the reare. L. Lentulus, and L. Manlius Acidinus in Spaine being to fight with the Illegretes, and Antefians, and other Spaniards, that had revolted from the Romans; in this very kinde of placing horse in the reare imitated, and gotte the advantage off, and defeated their enemies. Livy hath the story, and writes thus in effect. The next day at the rising of the sonne the Spaniards being all armed, and set in order, shewed their battail, about a mile from the Roman campe. The Antefians in the midst held the Illegretes held the right winge, other obscure people of Spaine the left: Betwixt the wings, and the middle parte, they left broad intervals, to give passage to their horse: (when time should bee) to send them through to charge. The Romans Embattailed after their wonted manner, Onely then imitated the enemy, in leaving open waies, for their horse betwixt the legions. Lentulus imagining that partye, and none other, should have use of their horse, that first possessed these intervals of the adverse battaille, commaunded Cornelius the Tribune to give direction to the horsemen, presently to charge through, the foot on both sides came to blowes, and the fight was hard, when the Roman horsemen passing through the Spaces, and falling vpon the midst of their enemies at once disordered the battaille of foot and shut vp the wayes against the Spanish horse; by which means, after no long

fight,

fight, the enemy was utterly defeated. Where Livy saith the Romans embattailed after their wonted manner, his meaning is they ordered them selves in Maniples, or Battalions, as wee now terme them (for that was their wont.) But when he addeth, they imitated the enemy in leaving open waies for the horse, betwixt the legions. Wee must understand that a legion was thus embattailed: First they divided their legion into thirty Maniples, ten of the Hastati: ten of the Principes, and ten of the Triarii. The ten maniples of the Hastati, they set first in an even front, leaving soe much distance, or void ground betwixt every Maniple, as a Maniple is selfe took vp in standing. At a reasonable space behind, were the Principes placed in as many maniples: but soe that their maniples stood directly behind the void spaces of the Hastati. And against the bodies of the hastati, they left likewise spaces in the Principes to the end, the Hastati being overlaid, might retire within these spaces: or else themselves might advance against the enemy, through the intervals of the Hastati. Lastly at a larger distance behind these were the Triarii set, and divided with spaces betwixt every maniple, which spaces were great enough to receive the Principes, in case they retired also. Now the Horse being ordered in the reare after the Triarii, if from thence, they had gon to charge the Enemies: from, through the spaces of the Triarii, they must of necessity, have fallen upon the Maniples of the Principes whoe were set directly against the intervals or spaces.

To give therefore free passage to their horse, the Roman Generals removed the maniples of the Principes from their ordinary place, and byflowed them, in a right line, after the maniples of the Hastati, and made an open lane, (as it were) from the reare of their battell to the front. So that nothing hindred the horse, but they might freely fly up to, and fall upon the enemies front. And yet I take not Alians meaning, to be, that the Horse set in the reare, should during the time of the fight still remaine there. For soe would no great service bee had of them. But hee placed them there rather to avoide confusion in ordering the foot. And that after their embattailing, they might bee led from thence to any place, front, or flanke, or where soever they might yield most use. For in the fifth and twentieth chapter, he would have both light armed, and heavy soe placed, that they might answer all attempts of the enemy. And in his caution following, hee saith, if occasion require both horse and light armed, may bee otherwise placed. That they were usually placed in the wings, I have before shewed. The examples declare they were placed in the reare sometimes.

Of placing in the front there are also examples. The Lacedaemonians at the battaille of Leuctra against the Thebans placed their horse before their Phalanx, and tried their fortune with them, and were beaten, before the foote was tryed: The Persians at the River Gra. e. Plutarch in vit. alex. Alexander, that was to passe over, and embattailed their foote behind the horse. And Alexander encountered them first with his horse, before his foote could get over: One example more I will add to shewe the reason, why Horse are sometimes placed before the front of the Phalanx of foot. Eumenes being to fight against Craterus and Neopolemus, both great generals, that had served under Alexander in all his wars, ordered the fight thus: Because hee under stood, that their Army consisted of twenty thousand foote, the most parte Macedonians renowned for their valour, and skill in fight (in whom they set their greatest trust) and of more then two thousand horse; and knewe his owne foote, albeit they were as many in number, yettall to bee ramasses of diuerse kinds of people, and that his owne horse were five thousand, with exceeded the enemy both in number, and valor, hee determined to hazard the battaille vpon his horse, before the two Phalanges of foote should come together: Advancing therefore with his horse farre before

his

a Arrian. lib. 7.
c. 16.
d. 16.
e. 16.

b Xenoph. hist.
c. 2. lib. 4. p. 179.

a Livy Crea. 1.
lib. 5. p. 179. A.
The like was
done by M. Val-
erius Belliculus
against the
Etrusci. Livy dec. 1.
lib. 10. p. 22. C.
And by P. Pa-
pyrius against
the Samnites. Livy
dec. 1. lib. 10.
p. 22. C.
And by Sulla
against A. Catulus.
Liv. lib. 8. p. 22. J.

a Livy dec. 1.
lib. 8. p. 22. C.

b Xenoph. hist.
c. 2. lib. 4. p. 179. A.

c Plutarch in vit.
alex. lib. 1. p. 14. B.

d Plutarch in vit.
romana. p. 10. C.

his foote, hee tooke the right wing him selfe, and gaue the left to two strangers, to Pharnabazus a Persian the sonne of Artabazus, and to Phenix a Tenedian: Craterus stood in the right wing of his owne horse, and placed Neoptolemus on the left. And seeing the enemies horse coming forward, with greates fury charged them first, and fought brauely. But his horse failing vnder him, hee fell to ground, and it being not knowne, whoe hee was by reason of the medly, and throng of those, that gaue backe, and fled, hee was trampled vnder foote, and ended his life after a strange manner. By his death the enemy tooke courage, and encompassing their aduersaries on all sides, made a great slaughter, and the right wing, after this manner, with might overpressed, and put to the worl, was faine to fly for succour to the Phalange of foote. In the left wing Neoptolemus stood directly against Eumenes, and the mutuall fight of eche bredde a greates emulation betwixt the generalls, and a feruent desire to come to hands. And being easely knowne, both by their horse, and other marks, they slewe one vpon another, and out of their single fight made away to a consequent victorie. And first they assailed one another with swords, and after fell into an vnlooked for, and wonderfull Monomachy, for being transported with anger, and mutuall hatred, quitting the raines of their bridles, with their left hands they eache seized, and tooke hold vpon the body of other, which hapening, and the horse continuing their careere, and springing from vnder them, they both fell to the ground, neither of them could wel arise by reason of the suddaine, & violent fall, and of the heavines of their armor. Yet Eumenes got vp first, and prevented Neoptolemus, striking him on the ham. The wounde was wide, and his strength of footing thereby failed, & soe lay as one, that had noe vse of his legges, being not able to raise himselfe because of the hurt: notwithstanding, courage overcoming the weaknes of his body, hee list vp himselfe vpon his knees, and hurt his aduersarie in the arme, and thighes, giving him three wounds. But none of the wounds were mortall, and they being yet warme, Eumenes with a second blowe hitting his necke, slewe Neoptolemus outright. Whilest these things were a doing the rest of the horse fell together. Many were slaine on either side: some therefore falling, other being wounded, at the first the daunger was equall. Afterward, when the death of Neoptolemus was openly knowne, and that the other wing was put to flight, every one shifted for himselfe, & made towards the Phalange of foote, as to a strong wall of defence to saue himselfe. This was the issue of the battaile. Wherein Eumenes, placing his horse before his foote, because hee held them his strength, and with the enemye the hazard of the day, shewed himselfe both in counsell, and action, a greates general. And Craterus on the contrary side, albeit highly esteemed amongst the Macedonians, as one, that had with great succiency served Alexander in all his warres, yet failed in iudgment, in that hee choseth rather with his horse to encounter the stronger parte of his enemies forces, then with his Macedonian Phalange (which Eumenes himselfe feared) to trie his fortune. For as it is a pointe of foresight to knowe a mans owne advantage, and vse it: Soe it is noe lesse iudgement, to knowe wherein the enemye is stronger, and to avoide yt. Eumenes did both; for hee used his owne horse, which were his strength, and brought to passe, that Craterus his Phalange did him noe good, in as much as they never came to fight. Craterus failed in both, in that hee neither brought his Phalange to fight, nor yet provided sufficientlie to encounter Eumenes horse; which exceeded his in valour, and number, so appeares both, that horse were placed before the front of the foote, and also the storie giues the reason, why they were placed there.

of

Of the number of the armed foote, of the light-armed, and of the Horse.

CHAP. VIII.

NOW are wee to lay out, what number the armed-foote, the light-armed, and the Horse ought to bee, and how particularly ordered, and how vpon occasion the Battaille may speedely be transformed into diuers shapes, & formes, and what discipline vsed for the motion of the severall parts of it. Wee cannot with any probabilitye set downe a precise number of forces to be leyed. For as much as euery man is to proportion his lewie according to the importance and qualitie of the warre in hand. This yet must not escape vs, that such a number is to bee chosen, as will fitt the diuers shapes, and transmutations of our Troopes. As if in case wee were to double, or to multiply, and manifoldly enlarge the length of the Phalange, or els to lessen, and drawe it vp into a narrower roome. For this cause choice is made of a number, that may be, reparted into half continually, till you come to one. Hence is it, that most Tactics writers would haue a Phalange to consist of sixteen thousand, three hundred, eightie, and foure armed foote, and of half so many light-armed, and of half as many Horse, as light-armed. For 16384. may bee reparted continually into half, till you come to one. Therefore for prooffe, and Examples sake this numbers is admitted. And where wee haue allotted sixteen men to every file, the whole masse will arise to one thousand, twenty, and foure files.

Notes.

THE Chapter before spake of the parts and dimension of the Phalange, and of the place of the armed, the horse, and light armed. This treatise of the number that goeth to the Phalange. In choise of which number, Ælian saith consideration is not soe much to be had of multitude, as of time: for service. For such a number as cannot apply bee disposed of for fight, is rather meanes of confusion, then of order without which no fight can be maintained: Therefore such a number is to bee chosen as will serue.

The diuers shapes, and transmutations of our Battaille. Every motion in the battaile makes not a Transmutation, or diuersitie of shape. In turning of faces to the one hand or other there is noe other shape of the Phalange, then was at first: As a man turning his face any way, the same proportion of lineaments remains that was in him before. Soe likewise in countermarch or wheeling after the Countermarche, or wheeling is done, every souldier if he keep his right distance, and remaine in file and ranke, hath the place hee had before: And soe noe transfiguration of length or of depth followeth. The motion then, that Ælian meanes to make Transmutation, are Doublings: For whether you enlarge the length, or depth, of your Phalange, you straight induce another shape. A long fronted Phalange, and a Horse differ much in forme. If you will make of the ordinarie Phalange a horse, you are to double your files soe often, as your thinke convenient for the length of your horse. Then if from the Horse, you would returne it to the first forme, you are not to cease doubling Ranks, till you haue gained that forme: likewise if of your ordinarie Phalange, you would make a long fronted Phalange, your ranks are to bee doubled, and by continuing your doubling, you may drawe out what length you will. And

contrary

contrarywise, by due doubling your files againe, you come to the first forme: How much you double your Ranks. See much you take away from the depth of your Phalange, as on the other side, doubling of your files, diminisheth the length. For the purpose, your Phalange is sixteen deep, double your Ranks; the depth hath but eight men; double it once more, and it hath but foure. Soe is the Phalange consisting of foure ranks, & every ranke, hath foure thousand, and ninety six men in it: But the length is foure times as much as it was. In like manner doubling your files (which in Alians Phalange are a thousand, and twenty foure) the first doubling lessth five hundred, and twelve files and soe many enuyes; the second seven hundred, and sixty eight, and two hundred fifty six remaine; and soe many men haue you in a ranke. But where the Phalange was but sixteen deep, now in the second doubling it is become sixty foure deep: If you please to reduce it to the first forme, two doublings of ranks will suffice. Here wee must understand that doubling ranks, is not to make twice soe many as they were before, but to giue twice soe many men, to every ranke, as they had before by infertinge the even ranks into the odd; as the second into the first, and the fourth into the third, and the sixth into the fourth, and the eighth into the sixth, &c. The use of doubling I will shewe in my notes upon the twenty nine chapter of this booke. Alian therefore would haue his Phalange, of such a number as may be reparted continually into halfe, till you come to one; which number hee saith to be sixteen thousand three hundred, and eighty foure. And yet ariseth out of the Multiplication of one by two (so still doubling the product, till you haue made up the full number, of sixteen thousand three hundred, and eighty foure. And as the Multiplication by two begetteth this number, soe being diuided by two continually, it may be reduced at last to one: Which is the thing, that Alian aymes at. For the numbers, that haue not equall diuision by half, leaue some for numerary men in the Phalange: (Which) in doubling will disorder both files, and Ranks: Every man acquainted with the Lowe country militarie exercise at this day, knoweth, that when there is an vneuen number of files, the odd file for numerary brings a difference, and cannot bee doubled in the sort as the rest are: As in five, seven, nine, eleven, severall bodies of files. Two, six, eight, ten, may well bee doubled, and become two, three, foure, five files a piece: but the fifth, seventh, ninth, eleventh, must bee severed from the rest of the doubled files; and serue no purpose, being not matchable in depth with the rest after their doubling. The same reason is of ranks: Now when Alian saith, that this number in a Phalange may be diuided by half and reduced at last to one, Wee must with all understand, that the file of the Phalange in such diuision, ought to be either of eight, or sixteen men a piece. For no number under eight, except foure, or two (which fasten not the depth, of a Phalange) nor betwixt eight, and sixteen, is diuisible by half, till you come to one. Nor nor above sixteen except it bee produced out of the duplications of sixteen. A file of 12 comes nearest. And of that number was the file of Cyrus in Xenophon. Such a file notwithstanding by diuision of two states at three, and can descend no lower. Ten was the old file of the Grecians, and it was called Decas. And albeit after ward upon better consideration they enlarged the number of the file to twelue, yet they retained the name of Decas still. But ten receiveth but one diuision, and goeth downe ward noe further then five. The vneuen number under sixteen cannot bee diuided at all. Files by fraction. As thirteen, which if you will diuide by halfe, the quotient will bee six, and there remaineth an odd man over: of which number, if all the files of the Phalange should bee, you should haue a thousand, and two hundred, and sixty, which will receiue noe more, then two doublings without a fraction. If thin the files be above sixteen, and vnder thirty two, you cannot reduce them continually by half, but you must faile of the manner, that Alian speaks of. As for the number of sixteen thousand three hundred, and eighty foure, albeit it is self, it is diuisible by 2 till you come or descend

3 Xen. Cyrop.
lib. 1. c. 11.

to 1, yet we must not consider it apart, as an abstract by it selfe, but as it nambreth, and is applied to the Phalange. In which respect, it giueth a 1024 files of 16 deepe, which files will still hold out the doubling, till you come to one file.

3 A Phalango consist of 16384. Alian (out of the most Tactics writers as he professeth) will haue the Phalange of sixteen thousand, and three hundred, eighty and some men. I haue noted before that a Phalange may be more or lesse, than this number. But I take this to be the number of the Macedonian Phalange. * Appian seems to testifie a Appian. in Of Syracusa 167. B. with me, thus he saith: Antiochus whole army consisted of 70000 men. which the chiefeft strength was the Phalange of Macedonians, containing 16000 men, ordered according to the forme, that Philip and Alexander had before used. He placed them in the middle, diuiding the 16000, into 10 equal parts, in euery of which parts was 50 men in front, and 32 in depth, and vpon the flanks of euery part 22. the thew of the Phalange was like a wall, of the Elephants like turretts: hitherto Appian. I haue translated He Phalanx, He Macedonian according to the word, the Phalange of the Macedonians, where the right meaning is, the Macedonian Phalange. For it consisted not of Macedonians, but was armed, and ordered, after the Macedonian manner. For how was it possible for Antiochus to wage, and haue in his seruice 16000 Macedonians, being neuer himselfe King of Macedonia, and the King, that then was (namely Philip the sonne of Demetrius) was his enemy, and in league with the Romans? Besides Appian hath in expresse words: the Phalange was armed, and ordered, according to the institution of Philip and Alexander: whose manner Antiochus might well retaine, considering he was lineally descended from Seleucus, the successor of Alexander in the kingdom of Asiria: And Seleucus had bene in the seruice of Alexander in the whole conquest of Persia. * Liuy saith also, they were armed after the Macedonian manner. Whereby a man may inferre, they were no Macedonians: Hee speaking of the same battaile (which was the battell of Antiochus against L. Scipio) hath thus: The Kings army was mingled of sundry nations, and diuers with diffimilitude of armes and aides. There were 16000 foote armed after the manner of the Macedonians. They were called Phalangites. This was the middle of the battell, and in front diuided into 10 parts, which parts were distinguished by placing 2. Elephants in each interval. The battell had 32 ranks in depth. It was the principall strength of the Kings forces, and both with the other thew, and also with the Elephants, which were eminent amongst the Armed only, brought with it great terror. Liuy saith the 16000 were armed after the Macedonian manner, and were called Phalangites: Appian, that there were 16000 ordered and distributed according to the ordinance of Philip and Alexander. Liuy, and Appian, both agree, that there was 10 parts, and euery part secured with intervals, and had 32 men in depth, which is the Macedonian file once doubled. Liuy speaketh not of the number of the length of the Phalange. Appian saith plainly there were 50 in front, of euery of the 10 parts, which amounts to 500: for 10 times 50 makes 500. Now if you multiply the length of the Phalange which is 500 by the depth, which is 32, you haue the 16000, whereof Liuy and Appian speake. But yett I respect a doubt, in the difference betwixt both these authors, and Alian. Liuy, and Appian both giuing but 16000: Alian 16384 Roman (we may probably coniecture) was halfe a stranger, in the Art Tactics of the Grecians, and that, which he wrote, he had from others: perhaps no better skiled in the same Art than himselfe. Appian was a Grecian (for so those of Alexandria in Egypt accounted themselves), after Ptolemy the first had established that Crowne in his family and as his historie sheweth, well acquainted with the order the Grecians held in embat-

b Liv. Decad.
4 lib. 7. 141. A.

ling their armies, and therefore we may the better rely upon his authority. Who albeit hee first affirmed the Phalange was of the number of 16000, yet after in numbering the depth and length alone, he findeth 16000: and further expounding his own meaning he sheweth, there were more upon the flanks of the ten parts, into which the Phalange was divided. His words import: That Antiochus divided his Phalange into 100 equal parts, giving every part in front 50 men, in depth 32; which being multiplied together, make up the 16000. He addeth: And in the flanks of every part he set 22. If the meaning be, he set 22 upon each flanks of every part, the parts being 10, and the flanks 20, the number will arise to 440, where Elian alloweth no more than 384. But if 22 were added to one of the flanks of each division, which also being collectively taken, are flanks in the plural number, we shall come short and finde no more than 220. Yet whether sense of both you admit, it is plain, that Appian attributeth more, than 160 thousand, to that Macedonian Phalange. And it may be, there is an error in the number of the 22, and that it ought to be written 32. For if Antiochus had given 32, as he gave 22, to one flanks of every part, and set 32 upon the uttermost flanks of every wing to strengthen them, of the 12 times 32 had arisen the just number of Elians Phalange; which number is the fittest, for use, and for division of the Phalange in all doublings. The armed foot: then, according to Elian, ought to be, 16384. The light armed.

4 Halfe so many.] The armed amongst the Gracians were accounted the strength of the field, which was the cause their number was greatest. For you shall not finde in their battules for the most part, that the light armed amounted to halfe the number of the armed: The fact of Cyrus sheweth what account he made of light armed: * Xenophon reporteth it thus: He led with him the Lydians, those whom he saw to take delight in Armes, horse, and chariots, and willingly doe, what they were commanded, he gave armes to, of those whom he saw followed him against their wills, he gave the horses to the Persians, that were his first companions in Armes. All that followed him unarmed, he exercised to the sling, because he reckoned that weapon most service of all others. How much you increase the number of the light armed, so much you diminish the number of the armed, and by consequent so much weaken your field. * For the light cannot maintain any stable fight, but in case of danger they are forced either to shew a faire pair of beeles, or else retire to the armed for succor: They serve they for many seasons with the armed. And the proportion that Elian setteth downe, namely to have halfe as many of them, as there are armed, standeth to good reason: * The Romans notwithstanding, were more sparing in their light armed, & allowed not above the 4th part of them, or little more, to the armed. The Legion contained (saith * Polybius) 4200 footmen. Of these they chose 600 Triarii, 1200 b. Itali, 1200 Principes, (which come to 3000) and the rest Velites, which were 1200. And the Velites were the same in effect amongst the Romans, that the light armed amongst the Gracians, albeit their arming somewhat differed. Elian before shewed, that the Gracian light armed had no manner of defensive armour, but offensive only, as bowes, darts, or staves. * Polybius describeth the Armes of the Velites to be a Sword, a Pallas, (which is a small Target), and darts; the sword a Spanish sword, the Target a little round Target, a foote and a halfe (for so Casaubon correcteth Tripedon) in breadth; the darts in the stea of 3 foote long, and a finger thicke, and the head almost a foote long. And * Livy mentioning the skirmishes, that fell out betwixt the horsemen of King Philip of Macedonia, and Sulpitius the Roman Consul, compareth both in Armes together, telling that either party had their light armed joyned to their horse, and that coming to fight, the Romans had the better. So (saith he) neither the Kings horse, vnaccustomed to a stedfast fight, were able to match the Roman

* Xenoph.
Cyrus. lib. 7.
129. B.

* Xenoph.
Cyrus. lib. 6.
167. C.

* Polyb. lib. 6
428. B. C.

* Polyb. lib. 6
428. D.

* Livy Decad.
1. lib. 29. p. 18.
B.

Roman horse, nor yet the foote skipping and leaping here and there, and almost halfe naked in their kinde of Armes, to be compared to the Roman Velites, having affaile his enemy. The number then of Elians light armed, ought to be 8192, and these being ranged behinde the armed 8 deep (so they are fitt for service) will make 1024 files, as many as the armed did.

5 Halfe as many horse, as &c.] The horse are in number 4096, and proportioned to the foote (comprehending the light armed) as 1. to 6. The armed foot, and light armed together make 24576: the horse 4096. And this was * Alexanders proportion, as Diodor. lib. 17. 171. c. For he had about 30000 foote, and 5000 horse, or not many more, as Diodorus saith. * Tustin gives him 30000 foote, & 5000 horse. * Tustin lib. 1. 141. c. 39. Yet this number held not alwaies amongst the Macedonians themselves; I meane Alexanders Captaines, that possessed his kingdomes after his death. Thereas may be seen in Ciuill warres they made their legions, not as they would, but as they could. * In the battle betwixt Eumenes, and Craterus, (I spake of that battell before) Craterus had 20000 foote, & 2000 horse; Eumenes had 20000 foote, & 500 horse. Craterus the proportion of 1. to 10; Eumenes of 1. to 4. * Antigonus fighting against Eumenes in Cappadocia, had in his Army above 10000 foote, and 2000 horse; Eumenes had as before. Antigonus horse were to the foote, as 1. to 5. * The same Antigonus fighting against Alceas, the brother of Perdiccas, had in his Army 40000 foote, and more than 7000 horse; the proportion well nigh of 1. to 6; Alceas had no more, then 16000 foote, and 900 horse, failing much of Elians number. * Antigonus in his second battell against Eumenes, had 28000 footmen, and 800 horse, which is 1. to 35. * Antigonus fighting against Eumenes, had 35000 foote, and 6000 horse, very neare Elians proportion. Many other examples are to be read in Diodorus. But (as I said) these are Rato and 3, as it alwaies fallth out in fadaine leues. And it seemeth the number of horse used it after be received his Armes from Philip proportion; considering Alexander had gathered it together with intent to invade Persia. And yet I finde * that Philip himselfe, when he fought against the Athenians and Boeotians at Cheronea, had more than 30000 foote, and 2000 horse; which is 1. to 15; and in divers other fights difference was done, but was best to be done. And the number that Elian speaketh of suites his peece, and into 64 troups; the greatest ranke of each wedge being 15, will in the rear equal the front of the armed, and of the light armed; not in number of files (for the in quantitie of place giuing to the horte, standing in their order of 6 foote betwixt man and man, the 128 cubits of surplage toward the difference of the horses bodies, and toward the small spaces that are to be left, betwixt Troope, and Troope. * The Romans allowed a faire lesse rate of horse to the foote. In a Legion, according to Polybius his account, there were of Citizens 4200 foote, and 300 horse; of allies, and confederates 4200 foote, and 600 horse. In a Consular Army were 2 Legions of Citizens, and 2 of allies, which came to 16800, a number not much differing from Elians Phalange of 4096, (the number Elian alloweth to his Phalange) and holdeth proportion of about 1. to 9. The reason of this difference, may appeare in the fact of * Eumenes; who not much trusting his forces of foote against the Macedonians (accounted the best soldiers in the world) was forced to

* Diodor. lib. 18. 644. c.

* Tustin lib. 1. 141. c. 39.

* Diod. Sicul. lib. 18. 644. c.

* Diod. Sicul. lib. 18. 644. c.

* Diod. Sicul. lib. 18. 644. c.

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* Diod. Sicul. lib. 18. 644. c.

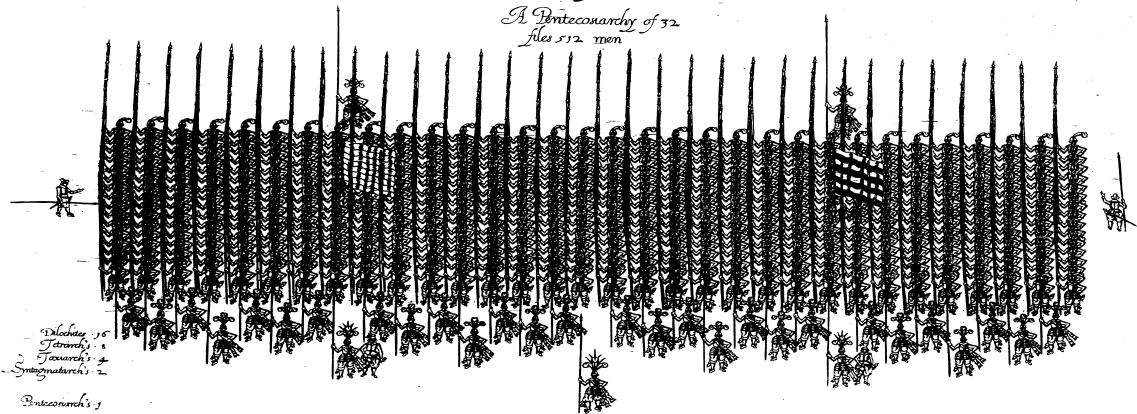
* Diod. Sicul. lib. 18. 644. c.

* Diod. Sicul. lib. 18. 644. c.

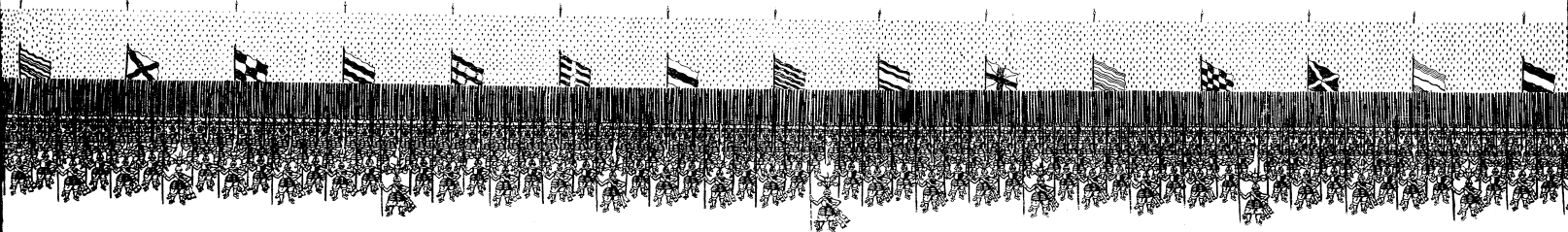
* Diod. Sicul. lib. 18. 644. c.

Cap. 9.

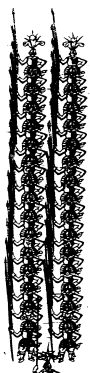
A Bntecconarchy of 32
files 512 men



Capt. 9.
A. Phalaris, 9^e 256 jules 4096 men



St. Bulochy of
2 files 32 men



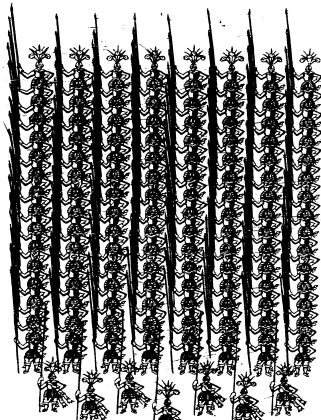
St. Duloite or *St. Commander*
of 2 files

St. Tarchy of
4 files 64 men



St. Tarchy or Commander
of 4 files

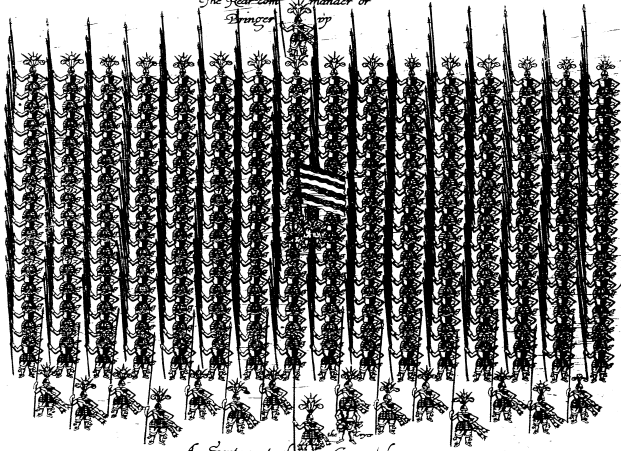
St. Taxis of
8 files 128 men



St. Taxis or Commander
of 8 files

The Rear

St. Synagma of
16 files 256 men
The Rear-com *Commander or*
Bringer



St. Synagmatarch or Commander
of 16 files

still: their number, and haue every one a severall Commander. The lest is two files joyned together, which is called a Dilochy; and because there are in Phalange 1024. files, there must also bee 512. Dilochies, which consist of two files a peece. If you double this body of two files, and make thereof a body of foure files, it hath an other name, and is called a Tetrarchy, of which Tetrarchies there are 256. in a Phalange. Double againe these 4. files, and I make 8, the body is called Taxis. And these eight files, being doubled bring out the Syntagma of 16. files; which is a square number of men, 16. in the front, and 16. in the flanke. And so proceeding still in 6. doublings more, you come at last to the fourefold Phalange containing the number of 16384. men, and 1024. files. Now as in the Phalange there are 16. bodies out of these doublings, the Dilochy being the first, and the fourefold Phalange the last: So doth *Ælian*, appoint for every body a Commander, who albeit they severally command, each his owne troupe, yet are they subordinately one under another, the lesser under the greater, till at last the soverainty of the command rest in the General of the Army. ^a The Dilochites are directed by the Tetrarches, the Tetrarches by the Tactarches, the Tactarches by the Syntagmarches, the Syntagmarches by the Pentecostarches, and they by the Chiliarches, over whom are Metarches, and over the Metarches the Phalangarches, and over them the Commanders of the wings, or Diphalangarches, and the soveraigne of the Armie or General is the highest, and last. The number of these Commanders a man would think were to no great purpose being in all the 2. Diphalangarchies comprised) 1022, besides the file Leaders, which standing in the heades of their files, amount but to two men more; that is to 1024. For so many (as I have said) are the files of the Phalange. But if the conveniency be observed, it will not seeme impertinent. ^b For all the Leaders being in front, (therefore are they called Leaders, because they precede, and the rest follow,) it makes both a gallant shew, and that rancke being as it were, the edge of our battaile, not only serves to hew a sunder, and rent a peece the forces of our enemy: But also standeth as an assured bulwarke of defence before the rest of the Armie, that followeth. And it is well noted by ^c Leo, that the multitude of Commanders ^d Leo cap. 4. 913. in the armie: And as it meanes to keep the Souldiers in greater obedience, and to give undoubted effect to all directions. Of what qualitie and disposition, those Leaders ought to be, you may see in the ^e fourth Chapter of *Leos* Tactics. Onely I will add, that as they are higher in dignity, so ought they in vertue and valour exceede those, that are under their command. ^f Leo cap. 4.

¹ A Dilochy] Consists of two files; for so signifies the word Dilochia: and the Lea-Dilochia, der is called a Dilochite.

² A Tetrarchy] Of foure files; and the Leader is called a Tetrarch, one that hath the command of foure files. And here I must once more admonish, that in the words of divers signification, we must not weigh, what is the proper signification, but how they are used in this Art, and booke.

For the word Tetrarch signifieth sometimes a King: as *Helychius* hath: and ^a *Deio-* Cicero in
tarus in Tully is called a Tetrarch, and ^b *Herode* in the Gospels, who both are common. ora. pro
by knowne for Kings. Thessaly likewise was divided into 4. Principalities, Thessali- Deirac
otis, Pthiotis, Pelasgioris, and Astiotis; whereof every one was named a Tetrarchy. c Luc.
Onely the difference is, that a Tetrarch being a King, or a Governour, signifies him, that hath the government of the fourth part of the land, (for a Tetrarchy is the government of the fourth part) But a Tetrarchy in *Ælian* signifies a body military consisting of foure parts (4. files) and the Tetrarch commands not over one alone, but over all the 4. parts.

³ A Taxis] As the word Tetrarchy is diversly taken, so is Taxis likewise. For sometimes it imports Order in a generall signification, as I noted before: Sometimes the

¹ order of a battaile : & sometimes a company of any kinde of Souldiers, foote, or horse : as Taxis Peltastrum, Taxis Equitum ; sometimes a single Phalange, as in ² Arrian mention is made of Taxis Oeni, Taxis Perdica, and Taxis Meleagri &c. who were Phalangarches, as the story sheweth. ³ Sometimes for all the armed, as Taxis Phalangitarum ; Sometimes a rancke of men standing embattailed, as in Thucydides, who describing the battell of the Lacedemonians, saith the front (which he calleth the first rancke) teen proteen Taxis) consisted of 448. But in a more speciall signification it is taken for a band of Souldiers. And in that signification the number varieth. ⁴ In Xenophon, it comprehendeth a hundred men : What the number of the Athenian Taxis was, I finde not delivered by any Writer. That they had Taxiarches ⁵ Polyenus sheweth plainly. And if a man with leave might gesse, I would imagine their Taxis consisted of 250 men : For I finde in the same place of Polyenus, that they had Chiliarchies, Pentecosiarchies, Taxies, and Lochagies. I have before shewed, that Lochos in Xenophon is made sometimes of about 100. men. Out of which may be inferred with probability, that Taxis, being the next degree above the Lochagie, hath the double number, or more ; The rather because a Chiliarchie having in it a 1000. the Pentecosiarchie must have 500. and by likelihood the Taxis 250. as being the next office under the Pentecosiarchie. But whatsoeuer the Taxis of the Athenians, or of other people was, ⁶ Elian maketh his Taxis up with 128 men, and 8. files ; which is a double number to the Tetrarchie. With whom Suidas agreeth, giving 2. Tetrarchies to a Taxis : and saith it consists of 128 men. The Commander of the Taxis is called a Taxiarch, as the Commander of the Tetrarchie is a Tetrarch. Here I am to note by the way, that the interpreter of Xenophon translateth Taxiarchia, the Commander of a Cohort ; where Taxis in the straighter signification cannot be taken for a Cohort because a Cohort differeth much in number, having in it at the least 500. and odde men, where the Taxis, when it is greatest hath no more then 128. And ⁷ Polybius saith plainly, that Spira is the Greeke word, that fully expresseth the Romaine Cohort.

⁸ A Syntagma] The word cometh of Syntaxis, or Syntatto, to place together ; and a Syntagma is a body compounded of many parts artificially put together. ⁹ But it may be taken for any body in the armie. ¹⁰ Diodorus reports of Dionysius the elder That after he had diuided his whole Armie, (which had in it 30000) into three parts, he employed two against the Carthaginian Campe in diuers manner : himselfe tooke the Syntagma, or third part, which consisted of mercenary Souldiers, and led against that quarter of the campe, which had the Engins. ¹¹ Elian also writeth the word diuersly : For he calles the whole armie by the name of Syntagma, in the plural number, and sometimes Syntagma in the singular. And further giues the same name to a file ; ¹² Suidas likewise describing the length of a Phalange, saith, it is the first rancke (Syntagma) of file Leaders, which stretcheth forth in a right line from winge to winge. Whereby appeareth that which the Logicians affirm, (which I touched before) that there are more things then names of things : And that fit names cannot be giuen to all. The names that haue beene giuen by antiquity, to expresse the severall bodies of the Phalange, are to be retained by us, as proper enough to signify the thing they meant. Neither are we to vary from them, unless we our selves can iudice better. The Syntagma that Elian here mentioneth, is framed of two Taxies, that is of 16. files, & of 256 men. The Commander of it is named a Syntagmatarch. And where he addeth, it is called of some a Xenagy, we are to understand that ¹³ Xenagos was he (amongst the Grecians) that had the command of a band of Strangers, as he that leuid Strangers was called a Xenologos ; and the band it selfe was called a Xenagy. Why the Syntagma should haue the appellation of Xenagy, I cannot diuine ; unless the reason were, because it was about the

number, whereof strangers made their companies, that served amongst the Grecians. And I thinke, and shall till better information, that the body of the light armed called a Xenagy mentioned hereafter, had that name likewise for the same reason. Now of all the bodies in this Chapter mentioned, there is none that cometh so neere the companies used at this day, as doth the Syntagma, for (excepting that our numbers differre, and our in diuers places more, or lesse) the offices of each are alike. You haue in the Syntagma a Lieutenant, or Reare Commander ; so in our Companies. In the Syntagma is an Ensigne, and an Ensigne-bearer ; the like in our Companies. In a Syntagma is one Sergeant, our Companies haue more. The Syntagma had a Trumpet, and our Companies for the most part haue two drummes. We enely want a Crier, which euery Syntagma amongst the Macedonians had. What the use and place of all the Officers was, I will straight discover.

¹⁴ Five superordinarie men ;] Namely the Ensigne the Reare-commander, the Trumpetter, the Sergeant, and the Crier of whom we last spake. That which I translated, superordinarie, is in Greeke Ectactoi. ¹⁵ Suidas giues the reason, why they were so called : because saith he, they were not numbered so part of the battaile, that is ordered in files & ranckes. ¹⁶ As Xenophon saith of Miriarches, Chiliarches, and Taxiarches, & other Commanders (whom Cyrus called to him) that they were not recounted amongst the military numbers, and might depart from the Phalange without altering the forme thereof. In the files they could not be, because they should so increase the number in the files, and make one longer then an other, and hinder doublings, and other motions, besides the deformity, they should bring in, in making the battaile uneven : And a file of themselves they could not make. The like disorder would they bring in the ranckes, where they could not conveniently stand, unless (some body filed with them, being much short of a file of themselves. Besides their employment is to stirre here and there apart, as they are commanded : where they of files, and ranckes neuer move single, but jointly, as shall seeme good to their Commander. And albeit the five bee removed from the battaile, yet remaineth the battaile without them entire of it selfe, and in perfect forme, as though there were no need of them, when notwithstanding their use is otherwise so needfull that although the battaile may be, it cannot well be without them.

An Ensigne] Our use is to call the Ensigne-bearer an Ensigne for breuities sake ; As a Drummer, a Drumme, a Trumpetter, a Trumpet ; and that not absurdly. A distinction will easily appeare in common speech, by the application of words of circumstance to the one, or the other. The end why enignes were diuersly appeareth in ¹⁷ Diodorus Siculus, he giuing diuers reasons, why the Egyptians (whom he accounted the ancientest of men) were carried away with superstition of worshipping Beasts, after the manner of the Countrey, hath amongst other words these in effect : A second cause the Egyptians giue, because of old time being in diuers conflicts thorough disorder in their Armie, vanquished by their borderers, they had recourse to the inuention & bearing of Ensignes in their troups. They lay therefore, that preparing images of the beasts, they now worshipped, and fastening them to the ends of long staves, the Commanders caused them to be borne aloft by means whereof every man knew of what troupe he was. And seeing this good order auailed much to victorie, they conceiued, that the beasts were the cause of their safety. In recompence whereof they ordered, that none of these beasts should be killed, but be honoured with religious care and worship. Ensignes were then deuised for readines to direct souldiers in particular, whether to resort in time of fight. ¹⁸ Cæsar praeface agreeth better to the telling of his owne souldiers disorder hath thus : Wherefoer part they came into by chance, and to what Ensigne soeuer, there they staid, least in seeking their owne

f Polyb lib. 3.
217. h. & lib.
11. 439 E.
g Xenoph. de
exped. lib. 2.
328 B. e. c. y.
rop. lib. 2.
302. C.
h Arrian lib. 12.
27 E.
h Polyb. lib. 12.
466 B.
i Xenoph. Cy.
rop. lib. 2.
41. D.
k Polyen. lib.
3. 5 in i. h. c. 22.

i Polyb. lib. 12.
641. C.

m Polybios
calletia Coh.
ort Syntagma.
lib. 11. 241. C.
n Diod. Sicul.
lib. 3. 391.

* Cap. 31.

o Suidas in
medos.

p Suidas in
Xenagos &
Tul. Poll. lib.
cap. 10.

q Polyb. lib. 1.
31. B.

Suidas in
Ectactoi.
r Xenoph. Cy.
rop. lib. 3. 28.
A.

Diodor. Si.
cul. lib. 1. 54.

u Cæsar. de
bell. gall. lib. 8.

in Vegetius. b.
cap. 13.

in Xenoph. Cy-
rop. lib. 7.
§ 72. D.

in Xenoph. Cy-
rop. lib. 7.
§ 72. D.

in Lippius ad
Polyb. lib. 4.
Dileg. 11.

owne they might happily lose the time of fight. And Vegetius enlargeth the cause writing thus: The ancient warriors perceiving that in time of fight the order, and embattailing of an Armie was quickly brought in route, and confusion, to avoid this inconvenience, divided the Cohorts into Companies, and appointed an Ensigne of every Company. So that in the Ensigne was written, of what Cohort and of what number in the Cohort the Company was. Which the souldier seeing, or reading could not erray from their Companions, though the tumult were never so great. Leo also maketh this use of the Ensigne: Vce command altho, saith he, that the heads of the Ensignes of every Company or Band be of one colour, and that the ilke of every Turme, or Drunge, have a colour by it selfe. And so that every Company may with ease know their owne Ensigne, other markes and tokens are to be added to the heads of the Ensignes, that according to Turmes, and Drunges, and Companies, they may be knowne. But in any case, let the Ensignes of every Turme be different one from another, & cleare to be discerned, that the souldiers may know them even at a farre distance. His meaning, as I take it, is that every great body, or regiment should beare in their Ensignes a severall colour, and that the Companies of that body should likewise hold themselves to the same colour in their Ensignes: So notwithstanding that (as the wile is at this day) the Ensignes of every Company should have a severall marke to be knowne by, besides the colour in generall. For so both the Regiment may be quickly discerned, and one Company with facilitate be distinguished from another. What the forme of the Ensigne was, we may out of the former place of Diodorus see: The Egyptians, saith he, counterfeited the shape of those Beasts, which they worshipped, fastened the Portraict to the end of long staves. Xenophon testifies the ilke of the Standard of Cyrus. Cyrus (saith he) commanded his army to cast their eyes upon the Standard, and to follow it with equal pace, and in order. The Standard was a golden Eagle stretch out upon the end of a long staffe. Which Standard is at this day the Standard of the Kings of Persia. The Ensigne was nothing else, but the figure of some beast advanced high upon the end of a long staffe. As of an Eagle, of a Wolfe, of a Horse, and such like, and sometimes they added peeces of coloured silke fastened under the images to make a greater difference betwixt the Ensignes. Whether our Ensignes at this day, made of many cells of Taffaty, or the ancient Ensignes of the Gracians (I may also add) of the Romans, for they observed the same forme) are the better for use, I will not dispute. I may notwithstanding freely say, that the stronger reason weigheth for the Ancient. For besides the authoritie of such excellent wits, as they were, and so exquisite in their invention, the reason of the lightness is to be preferred: Besides the wind hath no such force over them, and they neither hinder the Souldiers, that stand next by crawling, nor by slipping in their faces, nor take away the sight of such things as are to be observed and regarded in the field. For the matter whereof the Ensigne was made, see Iustus Lippius in his Commentaries to Polybius. As for the armour of the Ensigne-bearer (especially the Ensigne-bearer of the armed) I take it (for I have no authoritie therein) that he had the same defence Armour that the Souldier which fought under the Ensigne had (excepting the Target) both to assure himselfe from the flying weapons of the light armed, and from the pike and sword of the armed, in case the battaile were entred and pierced as farre, as the Ensigne. For it was no reason, he should carry a Target, lest both his hands should be bound, the right with the Ensigne, the left with the Target, and so he have no use of either against the enemy. And in the left hand I would give him a spear, or javelin, (not a pike, which cannot be wielded with one hand) for his owne defence, and to offend the enemy. Which weapon, I have read Ensignes

signes

signes of ancient time did beare. What the Ensignes place was, whether in front, or in the midst of the Battaille, I see it contrived. Patricius absolutely affirmeth, that the Ensignes were placed in the midst of the front, and had 8 files on the right, and 8 on the left, to the end they might be seen, and followed by all. That Ensignes were first invented to be a marke of severall bodies military in an Army, I have before shewed. But it followeth not thereof, that they were placed in the front in time of fight. For being in the middle, they no lesse gave notice, what the body was, than in the front. The reason following is of lesse force, inasmuch as the Souldier well knoweth when to follow, though he have no Ensigne at all, the Commander alwayes with his motion giving him direction, when to advance forward, when to turne his face to the right, or left hand, when to countermarch, when to double, and when to use all other motions military. And the Commanders were therefore called Leaders, because they went on before, and the souldiers followed after. So that the Ensigne, in regard of following, neede not to be in the front. Yet in exercising the troopes, and in marches, I finde, that the Ensigne was in the front, together with the Captaine, Crier, Trumpeter, and Guide. But I take the reason to be, because being in the midst, and having neither file, nor ranke with the rest, they might happily bring a confusion, and be a hinderance to the changes, and divers figures of the Battaille. When the time of fight was, the Ensigne retired to his place, that is to the midst. For so Leo interpreteth himselfe in his precept of closing files: which must be done, saith he, not onely by File-leaders in front, Commanders of file, and bringers-up in the Rear, but in the midst also, where the Ensigne standeth. And rather agree to Leo herein, because I see, it was the manner of the Romans also, to place their Ensignes in the midst of their Maniples. From whence came the appellations of Antesignani, Souldiers that stood before the Ensignes, and Postsignani, that stood behinde. Besides the Ensigne being in the front, the Ensigne-bearer may seeme to be a clap, who falling, the Ensigne goeth to ground, and is in danger of loosing, which is the greatest disgrace among the Romans, that might befall. Luffe, Elian himselfe in plain words placeth the Cornet of horse farre from the front. For speaking of the ordinarie Horse-troope, he saith it is to consist of 64 horse, the first ranke of 15 horse, the 2 of 13, the 3 of 11, the 4 of 9, descending still, and diminishing a horse in every ranke, till you come to one. He addeth, he shall carry the Cornet, that standeth in the second ranke next the ranke-Commander on the left hand: which ranke is the second ranke, himselfe declareth, making the ranke of 15 the first, the 12 the 2, which is the 7th from the front, and next the reare but one. If the Cornet have no place in front, why should the Ensigne, considering both service to one use, and the reasons of being, and following are equal to both? And albeit Suidas place the Ensigne, the Crier, the Tromper, and Sergeant, before the Battaille, the Lieutenant in the reare, it is notwithstanding to be understood, of the times of marching, or of exercise, which I take before. For what should that Rable of unarmed (being 4 in every Syntagma, and the whole Phalange 256.) doe in the front in the time of fight, but onely pester the bosom of the Armie: who therefore have the front, that they may make speedier way into the enemies battell?

7 A Reare-commander Was the same that a Lieutenant is with us. He commandeth the Souldiers in the Reare, no lesse then the Syntagmatarch in the front, and had his place in the Reare. What the duty of a Reare-commander was, I have shewed out of Cyrus words in Xenophon. And Elian afterwards testeth it downe most plainly. He was armed, as the rest of the armed of the Syntagma, namely with Pike, and Target, and with such other armes, as I have described in my notes upon the second Chapter.

8 A Trumpet

a Suidas in
Ecl. lib. 1.

8 A Trumpet.] *The invention of the Trumpet is attributed to Tirhenus Hercules sonne. But the different use of these officers is worth the noting out of* * Suidas : *The Crier, saith he, serueth to deliuer directions by voice, the Ensigne by signall, when noife taketh away the hearing of the voice: the Trumpet by sound, when thorough thickness of dust a signall cannot be discerned: The Sergeant to bring such things, and dispatch such messages, as his Syntagmatarch commands. So that these officers were held all necessary for a Company, the one supplying the defect of the other, and seruing for use when the other failed. The Trumpet then was to be used according to Suidas, when neither the Crier, nor Ensigne could doe service. With the Trumpet was the signall giuen for the Campe to remoue, for the Campe to lodge. By the Trumpet the Souldiers were taught their time to fight, their time to retreat. The Trumpet set and discharged the watch. From the Trumpet came the measure of the Marche, and the quickness, and slowness of Pace. In briefe, the Trumpet did all the offices, that the Dromme doth with vs at this day. Whether the Trumpet or Dromme, are of most use in the field, I may not now dispute. Onely I will say that the Grecians and Romans the most expert and iudicious Souldiers, that euer were, held themselves to Bacchus, who, as Polyenus reporteth, fighting against the Indians, first invented by Trumpets, gave the signall of Battails with Cymballs and Drommes. From him it came to the Indians, who used it altogether, as Curtius noteth in the battell betwixt King Alexander the Great, and Pokus. The Dromme of Parthians is described by Plutarch in the life of Craßus; and by Appian. And Leo saith, the Saracens, who invaded Christendome, and infected the Turkes with their superstition, ordered their fights by the Dromme. From this Easterne Asiaticall people it was brought into Europe; and now the generall custome is amongst all European Nations: that the foote haue Drommes in the field, the horse Trumpets. And yet for the Trumpet, I can not say, that all the Grecians held themselves precisely vnto it. Plutarch much commendeth the Lacedemonian manner of ioyning with the enemy, and writeth it in this sort: When the King hath offered the Goate (that was the Lacedemonian sacrifice, when they were to giue battaile) hee straight commands all the Army to crowne their heads, and the Flutes to sound the measure of *the Caster*: And himselfe with all beginneth the *Pean*; (the song they used when they were to charge) and aduanceth first against the enemy. So that it is a braue, and no lesse fearefull thing to behold them pacing according to the measure of the Flutes: neither dissolving their order, nor shewing any astonishment of minde, but mildly, and ioyfully approaching the danger of conflict, diuiding out their Marche to the sound of the instrument. For it is not likely, that men so demeaning themselves, can be transported with feare, or choler. Nay rather they must needs haue a settled minde full of hope, and assurance, as if God were present on their side: thus Plutarch. Out of whose words it is cleare, that the Lacedemonians used no Trumpets in fight, but Flutes, and made them their instruments to dance, as it were, the measures of warre by. For they used an easie, and slow pace, framed to the cadence of the sound; which may well be resembled to the solemne measure, in dancing. Athenæus recheiseth out of Herodotus, that the Lydians used the like. But he addeth; that the Cretans made choice of the Harpe for their instrument of warre; as though it had bene peculiar to that nation. Paulinus testifieth the like of the Lacedemonians. Polybius noteth so farre, but affirmeth onely that the Cretans, and Lacedemonians in stead of Trumpets brought in Flutes, and measures into the warre. And if it were so that the Lacedemonians used Harpes, it is like, they took them from the Cretans. For I finde*

b Polyenib. 1.
in Baccho §. 11.

c Curtiulib. 8.
c. 11.

d Plutarchin
Craßo.

e App. in Par-
thens 143.

f Leo cap. 18.
§. 113.

g Plutarch, in
Lytago.

h For the mea-
sure see Iul.
Pelluc. lib. 4.
cap. 10. §. 2.
i Ptoem. a.
b. 1. c. 11.
k Athenæus
lib. 11.
l Paulinus in
Lacens. 193.
m Polyb. lib. 4.
§. 28.

k Theod. lib. 8.
c. 113. A.
l Polyen. lib. 1.
in Prole §. 11.
m Athenæus
dispositio lib. 11.
c. 117. A.
n Paulinus in
Lacens. 193.
o Polyb. lib. 4.
§. 28.

in Plutarch, that Lycurgus brought many of his lawes from Crete, and had great familiarity with Thales the Cretan, whom he also sent to Lacedemon, to make an overture for the establishing of his lawes, that were then newly finished. Yet Diodorus Siculus reporteth, that the Lacedemonians used also Trumpets in their Battails. The writing of a fight that was betwixt the Thebans, and Lacedemonians vnder the leading of Agellus, these words in effect: There was a strong fight betwixt them a long time, and at first Agellus had the better; but afterward, when the Thebans sallied out of the City at all hands, Agellus seeing the multitude, caused the Trumpet to sound a retreat. The signe of retreat here, was giuen by Trumpets, and it seemeth the Lacedemonians had the use both of Trumpet, and Flute. Of the Flute in pacing toward the enemy to ioyne battailes of the Trumpet in all other military signalls, such (I haue before noted) as the rest of the Grecians gaue by Trumpet. The place of the Trumpet in the time of the Battaille was within the Phalange by the Ensigne. Thucydides placeth the Flutes of the Lacedemonians within the battaile, where they can finde no roome, vlesse they stand by the Ensignes. And albert Polienus saith, the Flute led the Army, and went before, yet that it is to be vnderstood in the marche. For in case of a Marche, or exercise, Leo also giueth the Trumpet place by the Captaine in front. When the fight commeth, he retireth himselfe to his place in the Battaille with the rest.

9 A Sergeant.] *The word Hyperetes signifieth a Minister, (which is all one with the French word Sergeant, as appeareth by the interpretation of our Law it selfe, wherein the Sergeants, next degree to Iudices, are called serientes ad legem. I reuene therefore the name of Sergeant, because it is familiar amongst souldiers. And a Sergeant hath the same office in our Warre that Hyperetes had amongst the Grecians. What his duty and service should be, is declared out of Suidas. There were of these officers, as well among the horse, as the foote, as appeareth in Xenophon. The estimation and worth of their places is expressed by the same Xenophon. Cyrus held the Sergeants in warre, saith he, worthy of no lesse honour, than messengers, and Embassadors in peace. He conceived that they ought to be trusty, skillful in matter of warre, vnderstanding, quick, swift, industrious, and void of feare; besides endued with all qualities requisite in the best sort of men; & that they were to accustometh themselves to refuse no manner of service, but willingly vndergo whatsoeuer is laid vpon them by their Commanders. These Sergeants attended their Commanders in Marches, and other times, save onely when Battaille was to be ioynd, and alwayes expected his command. During the fight, they retired to some place, where they might bee ready at call; for (as I said before) they could haue no place in front.*

10 A Crier.] *Concerning the office of a Crier, Suidas hath taught us, that he was to deliuer the Commanders pleasure by voice. Leo calleth him Mandator, from the Latine word, because he signified to the souldiers, Mandata, the commands of the Captaine. In exercise he stood at the head of the Troupe, taking from the Commander the words of direction, and making, as it were, proclamation of them to the Souldiers; and serued often, when neither Trumpet, nor signall might be giuen; he was otherwise also of great use. For in all busines whi required distinct signification of any sudden alteration in the Armie, the Crier had his part alone. Xenophon telleth in the Grecians returne out of Persia, that Clearchus their Generall led them not against the enemy, both because their courages began to fall, and also because they were all the day fasting, and it grew somewhat late. But yet he turned not out of the way, lest he might seeme to flee; but holding on right forward, he came with the vanguard*

a Plutarch in
Lytago.

b Diod. Sic.
lib. 17. c. 47.

c Polyen. lib. 1.
in Prole §. 11.

d Thucyd. lib. 8.
c. 113.

e Polienib. 1.
in Prole §. 11.

f Leo cap. 7.
§. 13.

g Suidas in
Ecl. lib. 1.

h Xenophon,
Cyrop. lib. 7.
c. 197. A.

i Xenophon,
Cyrop. lib. 2.
c. 46. D.

j Leo Suidas in
the word Keres.

k Leo cap. 4.
§. 10.

l Xenoph. de
exped. Cyri
lib. 1. c. 27. E.

vanguard, to the next Villages by sun-set, & there quartered; The very timber of the houses of some of those Villages was broken downe, and carried away by those of the Kings armie. The first therefore lodged themselves reasonably, the last being be-nighted every man took up his lodging as it fell out, and made a great noise, calling one after another, so that the enemies heard it. Whereby it came to passe, that the next of them fled out of their tents. This appeared the next day, for neither was there carriage-beast, nor Campe, nor fowle neere at hand to be seene. The King also was terrified as it should seeme, with the access of the Armie. Which he declared by the next daies worke. Yet in the proceesse of night a feare seafed the *Græcians* themselves: and the tumult, and hurleburie was such, as is wont, when men are possessed with feare. *Clearchus* in this distresse commanded *Toimides the Elian*, whom hee then had with him, the best *Crier* of those times after *Isocrates*, to make proclamation, that the Commanders signified generally, that whosoever could bring forth the Author of this tumult should haue a talent of silver for his paines. After this proclamation made by the *Crier* the Souldiers perceived, that their feare was vaine, and that the Commanders were in safety: *Heriberto Xenophon*. By which narration may appeare, that the *Crier* performed that, which neither *Trumpet* nor other signall could doe, the terror rising in the night (in which is the time of confusion and disorder) and neither could the *Trumpet* give any certaine sound to remedy the perill, nor any other signall be discerned by reason of the darkness; and this service was done by the *Crier* amongst his owne folke. His service against the enemy is declared in the fact of *Cleocritus* the Athenian *Crier* who after the fight, betwixt *Thrasybulus* and the 30. *Tyrants* (wherein *Critias* and *Hippomachus* were slaine) with a proclamation to the Citizens, reconciled them to *Thrasybulus*, and was cause that the *Tyrants* were deposed, and had their authoritie abrogated by the people. The like service was done by a *Crier* in the behalfe of the *Græcians* against the *Perians*, about the time of the battaile of *Platææ*. The storie is this: When the *Græcians* under the conduct of *Leontichides*, the *Lacedæmonian*, and *Xanthippus* the *Athenian*, had gathered a fleet of 250. Gallies together to the end to deliuer the *Ilanders*, and the Cities of the Continent of *Asia* the lesse, out of the seruitude of the *Persians*, they failed out of *Delos*. The *Persians* then remained at *Samos*. But hearing of the approach of the *Græcians*, they left *Samos*, and put ouer to *Mysale* a City of *Ionia*. And because they perceived their shippes vnfit for fight, they drew them on land, and fortified the place, where they landed, with a woden wall, and a deepe trench. Neuerthelesse they sent for foote forces, from *Sardes*, and other the next Cities, and assembled to the number of 100000 men; And made provision for all things necessarie for warre, the rather, because they suspected the *Ionians* would revolt. *Leontichides* hauing put his fleet in order, sailed towards the *Ionians*, that were in *Mysale*, and dispatched away before a shippe, wherein was a *Crier*, who had the shrillest voice in all the Armie. Him he commanded to saile vp close to the enemy, and to proclaim aloud, that the *Græcians* hauing ouercome the *Persians* at *Platææ*, were now come thither to deliuer and set free the *Græcians* Cities of *Asia*. This was done by *Leontichides* to the end to diffuser the *Asian* *Græcians* from the *Barbarians*, and to raise a tumult in the enemies Campe. Which also came to passe. What service could be of more importance, then to set a diuision betwixt the enemies? It was done by the voice of a *Crier*. More examples I could adde, but these may suffice. The *Criers* place was alwaies to attend the Commander in the head of the Troupes, vnlesse in the time of fight, at which time his voice could not be heard but gave place to the noise of *Trumpets* and clashing of armor.

a About a 126 pounds flourishing
tot. Poli lib. 9.
cap. 6. § 4. 437.

b Xenoph.
Hittor. Græc.
lib. 2. 474.

c Diodor. Sic.
lib. 11. 160.

11 A Tetragonall forme] That is of foure equall sides, or foure square; But we must vnderstand (which *Elian* after teacheth) that there are two kinds of Tetragonall, or square bodies military, one in number, the other in figure. In number, when the front, and flanke: of the body haue either of them as many Souldiers, as other, as the Synagma haith 16. in front, and 16. in flanke. In figure, when the number of the front is greater, then the number of the flanke, and yet front and flanke stretch out an equall length of ground; as in the squares of horse, whereof *Elian* speaketh as hereafter. This last square is at this day called a square of ground, because the face of ground, which containeth the length of the front, stretcheth out as fully as far as the face of ground, which containeth the depth of the flanke. It is caused by the difference of distance, which is betwixt the Souldiers in front, and betwixt the Souldiers in flanke. In front, being closed to fight, the distance betwixt Souldier, and Souldier, is but a cubite; that is a foote, and a halfe. The distance betwixt souldier, and souldier, in flanke, is two cubits, or three foote, which proportion will giue no more, then halfe so many men in flanke, as in front, and yet maintaineth the truenesse and euenesse of the sides of the figure; that is the length of the line, which mesureth the front, and flanke, shall be all one.

Elian cap. 18.

12 A Pentecostiarchie] The word is a command of 500, and that was sometimes the number. In the Macedonian Phalange, it comprehendeth a 512 men. The cause of difference is the difference betwixt the file of the Macedonians, and the file of the ancient *Græcians* (whereof I haue spoken before) the adde 12 men coming in by the fifth doubling of 16. And the number being so neere 500, though somewhat above, the name of Pentecostiarchie is still retained, because it was then in vse, and no other more fit could be found.

13 A Chiliarchie] The command of 1000 men according to the name; *Elian* giueth it a 1024, from the doubling of 512. The Tribunes of the Roman Legions are by the Greeke Historians termed Chiliarchs; yet is there a great difference; for the Chiliarchs haue no more command, then ouer their Chiliarchy consisting of 1000 men, and sometimes of more, as here in *Elian* of 1024. But every Tribune had in his turne the command of the whole Legion. And againe there being 12 Tribunes, to every Legion (which as first had int 3000, afterward 4000, then 5000, and in the time of *Vergilius* 6000 men) he w^d should a Tribune be called a Chiliarch and be a Leader of a thousand, there being in the Legion but 6000 men at the most, and yet 12 Tribunes; so that every one could not haue above 500 for his command; and in *Polybius* time, (the Legion being but 4200) not above 300 and adde. But the Roman manner of warre and ordering of troupes, differed much from the *Græcians* and the *Græcians* in rearing a Tribune a Chiliarch, took the next word, and most significant amongst them to expresse the charge of a Tribune. Our Coronells, for their command, of a Regiment come neerer to the *Græcians* Chiliarchs; yet aars differ in that they haue Companies in their owne Regiments, which the *Græcians* Chiliarchs had not, and where? *Q. Curtius* saith that the Chiliarchy was first instituted at Babylon by Alexander, as a reward for seruice, that it seemeth to be otherwise. For as I finde this in another Author, so finde I, that Chiliarchs were long before Alexanders time. * *Xenophon* reporteth, that *Cyrus* tooke to giue encouragement to his Souldiers to be valiant, promised to the *Taxiarchs* to make them Chiliarchs, to the *Lochagi* to make them *Taxiarchs*, to the *Decarchs* to make them *Lochagi*, to the *Pempadarchs* to make them *Decarchs*; and that *Cyrus* made *Chrysanthes* a Chiliarch of horse in regard of his worth, and forwardnes in seruice. * *Xenophon* Cy. And afterward he calleth *Phranuchus*, and *Asiadarchas*, Chiliarchs of horse, and *Artababul* and *Artageras* Chiliarchs of foote. b *Polyenus* winneth that in *Iphicratus* his time the Athenians had Chiliarchs, and Pentecostiarchs, so that the institution

a *Taxiarch*, in Remus.
b *Salsit* in Iugurtha.
c *Vergili* lib. 2. cap. 2.

d *Quint. Curt.* lib. 5. 106.

e *Xenoph. Cy.* lib. 2. 43.

f *Xenoph. Cy.* lib. 4. 88 B.

g *Polyen* lib. 2. 168. C.

h *Iphicratus* in Iphicratus lib. 2. 10.

of Chiliarchs could not be referred to Alexanders being at Babylon, considering it was in use before; And^a Arrian reporting the same story, saith not, that Alexander first brought up Chiliarchs there, but that he ordered two Lochi in every horse troupe (where to that day there had been none) and two Lochagi to command them. Indeed^b Diodorus Siculus, writes thus concerning a Chiliarch: Antipater, saith he, lying upon his death-bed declared Polyperchon Protector of the Kings (being the eldest of those, that had served Alexander in his warres, and much honoured of the Macedonians) and his owne sonne Cassander the Chiliarch, and second main in authority. The place and institution of this Chiliarchy which Antipater bestowed upon his sonne Cassander. Which notwithstanding seemes much to differ from the common Chiliarchy of the Phalange, where of Curtius speaks. For Diodorus saith, he was next to Polyperchon in authority. Where in the Phalange there were many Commanders, namely, the Merarchs, the Phalangarches etc. above the Chiliarch. Adds that he saith, the institution of this Chiliarch came from the Persian Kings, when the Chiliarchs of the Phalange had their beginning from the Græcians, and were ordinary in Phalanges, as I have shewed. Lastly where Diodorus reporteth, that it had the increase and advancement of honour from the Persian Kings, he sheweth plainly, it was not Alexanders institution. And the same Diodorus speaking of the death of Ochus King of Persia telleth, that he was poisoned by Bagoas his Chiliarch in the time of the reigne of Philip, Alexanders father. This Chiliarch then I take to be the same, that the Generall of an arme is with vs. And I can hardly be perswaded, that Antipater would bestow such a lesse place to his sonne Cassander.

14. A Merarchy [The command of a part or halfe; for a Phalangarchy consisteth of two Merarchies. So that a Merarchy is halfe the Phalangarchy, and containeth 1048 men. This part is also called Telos, of which I have spoken in my notes to the seventh Chapter. And yet the word Telos is not alone used in bodies of foote. For^c Thucydides speaking of the fight by sea betwixt the Corcyreans, and Corinthians, telleth, that the Corcyreans gave the right wing to ten Athenian ships, and having of their owne a 100 and 10 ships, divided them into three Teles, every of which was commanded by one of their Generalls: so that Telos there signifieth not a certain number of ships, but a part of their fleet divided into 3. & the Commanders of the Corcyreans are called Strategoi.

15. A Phalangarchie [The command of a single Phalange. Of this kinde were the 6 Phalanges in Alexanders army (as I take it) which were led by Canos, by Perdiccas, by Craterus, by Amyntas, by Ptolomy, by Meleager, and other; as Arrian saith: Before Philip and Alexander gathered those forces together, whereunto Persia was subdued, the armies were of smaller number amongst the Græcians. Neither was it in many Cities might to raise 400 men which go to the Phalangarchy of Ælian: If any day they might call it an army (Strategia, and the Commander Strategos) and the name of Strategos, or Generall was usually given to him, that commanded in chiefe over an army (though small) sent out by any City to warre. So then, as the Generall was called Strategos, a Phalangarchie might also be called Strategia. I have before noted, that the sections of the Phalange are limited, and laid out by the Phalangarchies. And where there are 3 sections in a Phalange, the middle section is in the midst of the 4 Phalangarchies: 2 Phalangarchies lying on the one side, and 2 on the other. The 2 other sections are one betwixt the 2 Phalangarchies of the right wing, the other betwixt the two Phalangarchies of the left wing, or betwixt every Phalangarchie was a space or section.

16. A Diophalangarchie [The command of two Phalangarchies: this was one of the mightiest. Ælian giueth it no Commander ordinary, neither doe I remember, that I have

have read Diophalangarches of Diophalangarchia as Phalangarches of Phalangarchia, Tetrarches of Tetrarchia. Yet was there only, always that commanded the wings, appointed to that place estimated and is so Philip, at the battle of Chromone, where he overthrow the power of the Athinians, and Thebans, and their Allies) took he one wing to himselfe, and gave the command of the other to Alexander his sonne being then but young. And Alexander at Granicus commanded himselfe the right wing, and appointed Gaugamela the left. So in the battalles against Darius at^d Ilissus in Cilicia, and at^e Gaugamela in Syria.

17. Meros [Meros is a part by division, coming of the word, meiro to divide. And as before, Amerarchie was halfe a Phalangarchie, here Meros is halfe the Phalangarchie. Each then signifieth halfe, but to distinguish them the one is called a Merarchie, that is a Commande of halfe, the other Meros, that is halfe: A distinction sufficient to know the one from the other. Two of these Meros make the Phalange concerning 16384 men. And these are the bodies of the Græcians, which Ælian in this Chapter describeth, and which were in use amongst the Macedonians. The other Græcians used other bodies in this manner. The Macedonians divided their whole City, into sixe bodies, hept a stoia, a name of which was called Moira, or Moiri. Their Generall was one of their Kings, for they had alwaies two. Every Moiri had a Polemarch (not much differing from our Cornetts) foure Lochagie, eight Pentecostiers, and sixtene Enomotarchs. What the number of the Moira was, is uncertaine, by reason of the error the Macedonians used in their government, as^f Thucydides saith. Plutarch^g reporteth, that Ephorus the Historian, giueth 500 men to the Moira, Callisthenes 700, Polybius and others 900. Diodorus Siculus, agreeeth with Ephorus, and alloweth but 500 to the Moira. And Xenophon numbeth the Moira of the Macedonians, which Iphicrates, defeated hard by Corinth, to have been about 500 men.

18. A Tactichie [The command of a whole Phalange, or of a whole Army. The scholiastes, of Thucydides, for the exact number of these bodies. The Athenians had their Chiliarchs, Pentecostiers, Taxiarchs, and Lochagie, as I have said before. And with them were the Lochagi last, where with the Macedonians used to be next the Polemarchs, but the number of the Lochos was not alike, as I have likewise before. Cyrus in Xenophon hath three orders military, Myriarchs, Camp-masters of ten thousand, Chiliarchs of a thousand, Taxiarchs of a hundred, Lochagi of tenne foure, Decarchies, called sometimes Dodecarchies of 12, Penteparchies of five, which are also called Hexadarchies. Vrbicius differeth not much from Ælian, face early in the number of the file, and the Officers of the file. For where Ælian hath sixtente to a file, Vrbicius hath but ten: and Vrbicius alloweth but two Commanders to the file, the File-leader, and the Bringer-up. Ælian saith the foure Enomotarchs. For the number of the Officers, in the Phalange they agree. And yet the names are not all one. Ælian beginneth with a Dilochite commanding two files, thirtie two men, Vrbicius with the Lochagos, who likewise commandeth two files of his, and five men more, Pentecostarches over fiftie men. Vrbicius hath next a Taxiarch, a Syntagmatarch, a Pentecostarch, a Chiliarch, a Merarch, a Phalangarch: And so hath Ælian. The most in Ælian is a Diophalangarch, Commander of 3192 men; Vrbicius termeth him a Myriarch that is the Leader of ten thousand men. The Tetraphalangarchie is left in both. But Vrbicius assigneth no more, then 16 thousand to his Phalange, Ælian 16 thousand 284. Iulius Pollux hath divided his bodis, a Myriarchie, a Chiliarchie, a Taxiarchie, a Hecatontarchie, and a Lochagie. What a proportion Leo makes, is to be seenne in the fourth Chapter of his Tactics. Because, he hath a mixture of the Roman and Greeke Orders, I thought the Reader to be docke.

The Tactics

	Dilochites	512.
	Tetrarchs	256.
	Taxiarchs	128.
	Synagmarchs	64.
	Pemecofiarchs	32.
	Chiliarchs	16.
	Merarchs	8.
	Phalangarchs	4.
		1020.

Thuse set downe the figures of all the bodies described by Elian as farre, as the Phalangarchie. The rest would have bene troublesome to insert as requiring more paper, then would stand with any reasonable proportion; neither are they greatly needfull. For two Phalangarchies ioyned in an euen front, and in a convenient distance, will figure out a Dibalange; foure in an euen front with a like distance will make the fourfold Phalange. So that thereby the forme of it will appeare.

The precedence, and dignitie of place in the offices of the Phalange.

CHAR. X.

THE best of the Phalange Commanders is placed on the right wing, the second on the left wing, the third in valour in the right hand next the second Phalange toward the middle section. The fourth on the left hand next the first Phalange toward the middle section likewise. So the first and fourth Phalange haue Commanders of the first, and fourth worth: The second and third Phalange haue Commanders of the second and third worth. Now wee will shew by demonstration, that the first, and fourth worth, and valor, are equal to the second, and third; So that the Commanders in each wing are of valor alike.

The Leaders also of the severall Tetrarchies are thus disposed. The first hath his place in the head of the first Phalange on the left hand; The second on the right hand of the second Phalange: The third on the left hand of the third Phalange: The fourth on the right hand of the fourth Phalange. Also the Leaders of files in every Tetrarchy are so placed, that the Leader of the first file hath preeminence in valor and place; the Leader of the fourth file standeth next him: Then the Leader of the third file, and the Leader of the second file last. For then are Dilochies of equal valor when the first Dilochie hath the first, and fourth Leaders, the second Dilochie the second, and the third Leaders in valor and reputation. For it appeareth in the Mathematicks, that, when there are Analogies, or answerable proportions of foure magnitudes propounded, that which ariseth of the first, and fourth, will counteruaile that, which ariseth of the second, and third magnitude. And because there are foure Tetrarchies in every Synagma, wee may giue the Leaders of the Tetrarchies place according to the same proportion, as to place the Tetrarch of the first Tetrarchy on the right hand giuing him the first place of worth on his left hand; the Tetrarch of the fourth Tetrarchy in the fourth place of worth. Then againe next him the Tetrarch of the third Tetrarchy in the third place of worth, and on his left

of Elian.

left hand the Tetrarch of the second Tetrarchy in the second place of worth. In like manner as the greater commands also to be proportioned.

Notes.

The former Chapter was of the Officers and of the bodies of the Phalange; this is of the place of every one, according to his worth. And first wee are to note, that all the Commanders were placed in front of these, that they commanded; to the end they might direct, and lead them as occasion should require. For Xenophon saith of Cyrus army, the Decadarchs, or file Leaders, had care of the files, the Lochages of the Decadarchs, the Taxiarchs of the Lochages, the Chiliarchs of the Taxiarchs, the Myriarchs of the Chiliarchs: So in the Phalange of Elian the file Leader had the command of his file, the Dilochites of the file Leader, the Tetrarchs of the Dilochites, the Taxiarchs of the Tetrarchs, and so the rest, till you come to the Generall, who cared for all, directed all, and under whom all the Commanders were. The Generall hath bene placed sometimes in the right wing, sometimes in the middle of the Phalange. Vegetius saith, that the Generall of the Armie is accustomed to be in the right wing betwixt the horse, and the foote. Hee addeth, this is the place, which governeth the whole battaille, from whence the salying out is most direct, and free. Therefore he standeth betwixt both, that hee might both gouerne horse, and foote with counsell, and with authority exhort them to fight. Cyrus in his battaille against Creteus, took his place in the right wing, betwixt the right hand point of the battaille, and of the horse, that were ranged in the wing; Alexander the great in his battailles took the same place; Timoleon in his fight against the Carthaginians placed himselfe in the middle of the battaille. Diodorus Siculus saith, that, it is the manner of the Scythians, that the King should stand in the middle of the Phalange. The like doth Arrian affirme of the Persians, and saith, that Darius had that place. Leo also giueth the middle of the battaille to the Generall. And there placeth the battaille over which he would haue him to command.

The best of the Phalangarches] This ordering of the Phalangarches the best on the right hand wing, the second on the left, the third next him in the left wing on his right hand toward the middle section: The fourth in the right wing on the left hand of the first toward the middle section thus, 1 2 3 4, cometh out of a Geometrical proportion, which proportion giueth law to the ordering of the rest of the Commanders. The rule is thus: 4. Magnitudes which equally exceede the one the other being compared together that which ariseth of the first, and fourth, is equal to that, which ariseth of the second, and third. As 2. 8. 14. 20. each exceedeth the other, 6. The addition of 2. to 10. begetteth an equal number to 8, and 14. added together. So is it in all other numbers, that haue the same equalitie of excess one above another. Out of this rule of proportion, Elian deriueth the giuing equalitie of strength in the Leaders to every body in the Phalange. For Leaders and Commanders are (or ought at least to bee) chosen by worth, and valour: and the preferment of the field haue bene held the due reward of vertue. Say then the Phalangarches are preferred to their places according to their worth, and that the first Phalangarch is most worthy, the second next him, the third next, the fourth least deserving of the four. If you should place them, as their worth is in a ranke successively one after another, the best before the first Phalangarchie in the right wing, the second before the next Phalangarchie in the same wing, and leaue the other two Phalangarches to command the left wing, the disproportion would be great; the third and fourth not being able to match the worth of the first, and second.

^a Xenoph. Cyrop. lib. 7. 85. C.
^b Xenoph. Cyrop. lib. 8. 203. A.

^c Vegetius lib. 3. cap. 18.

^d Xenoph. Cyrop. lib. 7. 196. B.
^e Plutarchin Timol. lib. 20. 743.
^f Diod. Sicul. lib. 20. 743.
^g Arrian. lib. 3. 26. C.
^h Leo cap. 4. § 65. & 67. & cap. 12. § 66.

But if you place the best Phalangarch before the first Phalangarchie on the right wing, the second before the second Phalangarchie of the left wing, the third Phalangarch next him before the third Phalangarchie on the left wing, toward the middle Section; the fourth before the fourth Phalangarchie of the right wing toward the same Section, the valours of the Commanders, will be equal in both wings. For as in the number 1. 2. 3. 4. one and 4. make 5, as many, as is made by joining 2 and 3 together 3 so the worth of the fourth Phalangarch joined to the worth of the first will arise as high in true valuation, as the worths of the second and third joined together. And where the Phalangarchie on the left corner of the left wing is called the second, and the next Phalangarchie standing in the same wing the third; it is to be understood that it is second in dignity, not in succession of number; for the fourth Phalangarchie in dignity stands in place and number next the first; and the second Phalangarchie hath the last place of the whole Phalange. Their places then are after this manner according to Elian.

$$\begin{array}{ccccccc} & 2 & & 1 & & 3 & & 4 \\ b & - & f & - & c & - & g & - & d & - & e & - & a \end{array}$$

For the understanding whereof, you are to note, that

- a signifieth the first Phalangarchie.
- b the second Phalangarchie.
- c the third Phalangarchie.
- d the fourth Phalangarchie.
- e the Section of the right wing.
- f the Section of the left wing.
- g the middle Section.
- 1 the place of the first Phalangarch.
- 2 the place of the second Phalangarch.
- 3 the place of the third Phalangarch.
- 4 the place of the fourth Phalangarch.

2 The Leaders of the Merarchies] As the Phalangarchs so are all the other Commanders of the [several] bodies placed by foure, and the same observation to be had, of the dignities of the place, that was in the Phalangarchs: and these 4 Merarchies (for Elian speaketh of no more than 4) must stand thus.

$$\begin{array}{ccccccccc} P & & M & & M & & P & & P & & M & & M & & P \\ 2 & & 2 & & 3 & & 3 & & 4 & & 4 & & 1 & & 1 \end{array}$$

P, standeth for Phalangarchs.

M, for Merarchs.

Robertellus confesseth he findeth these Merarchs so placed in a written booke, and it is the true placing. The figures, he setteth downe out of his owne wit (as he termeth it) carry with them no savour of Elians proportion. Patricius likewise seemeth to have mistaken this proportion in the figures he hath set downe, of which not one is right. I will referre the Reader to their bookes, admonishing him onely of the mistaking. But Elian placeth here but 4 Merarchs; what order shall be for the other foure? I have alwaies thought Elian defective in this place, neither could I hitherto finde any man, that hath brought light to cleare the doubt. Patricius that purposely disconfesseth of this place of Elian

Elian, speaketh of bestowing 4 Merarchs onely, as though the rest were to be throwne away from the Phalange. Robertellus seeketh to bestow all 8, left with them indeed, but not according to Elians proportion, which notwithstanding he would seeme to follow. His figure is this.

$$\begin{array}{ccccccc} P. M. M. & M. M. P. & P. M. M. & M. M. P. \\ 1. 8. 4. & 3. 6. 3. & 4. 5. 2. & 1. 7. 2. \\ \text{The right wing} & & \text{The Middle.} & & \text{The left wing.} \end{array}$$

The proportion is his, as I said, and not Elians. For Elian placed the first Merarch in the right wing; he placeth him in the left; Elian the second in the second Phalangarchie, he in the fourth; Elian the third in the left wing, he in the right; Elian the fourth in the fourth Phalangarchie, he in the first. The rest are so jumbled together, as though any thing else had been sought for, rather than proportion. I take not upon mee to over-rule any doubt, but if amongst the rest I entepose mine opinion, I hope, I shall not incurre just blame. Thus then: seeing Elians meaning is by evenesse and worth of number of both wings to finde out the worth of the Commanders of both, if I so distribute them, that the number of the one side shall counterbalance the number of the other, I cannot much stray from Elians meaning. The figure following will doe it.

$$\begin{array}{ccccccc} P. M. M. & M. M. P. & P. M. M. & M. M. P. \\ 1. 5. 1. & 4. 8. 4. & 3. 7. 3. & 2. 6. 2. \\ \text{The right wing} & & \text{The Middle.} & & \text{The left wing.} \end{array}$$

In this figure I have observed precisely the place, that Elian gave to the 4 Merarchs. The first standeth on the left hand of the first Phalangarchie; the second on the right hand of the second Phalangarchie; the third on the left hand of the third Phalangarchie; the 4th on the right hand of the 4th Phalangarchie. The rest I have added, and divided according to the placing of the first: So that the number that ariseth of the addition of both wings, is alike, and the proportion held. In all the rest of the bodies, where there is a Command over 4, the keeping of the proportion hath no difficulty. So every Phalangarchie commandeth over 4 Chiliarchs; every Merarch over 4 Pentecostarchs; every Chiliarch over 4 Syntagmatarchs; every Pentecostarch over 4 Taxiarchs; every Syntagmatarch over 4 Tetrarchs; every Taxiarch over 4 Dilochites; every Tetrarch over 4 files; In all which the Commander, which hath the right, hath the first place, he that hath the point of the left hand, the second place; he that standeth next to the Commander of the right hand, the third place; the last place is his, who standeth next to the Commander of the right point on the left hand. And for the place of the Phalangarchs, and of 4 of the Merarchs, and the file-leaders, and of the Tetrarchs, they are laid out by Elian. The rest appeare by these, and are to be squared by the same rule of proportion, as Elian admonished.

The whole wing.
 10 3

5 7
 1 3
 2 8
 2 6
 4 1
 2 3

The Merarchs
 alone.
 5 7
 1 3
 4 2
 2 6
 10 10

The

The distances to be observed betwene Souldier and Souldier in opening and shutting the Phalange.

CHAP. XI.

WE are now to speake of distances both in length, and depth betwixt Souldier, and Souldier, as they stand ordered in Battaille. The distances vary in three sorts. For first they are placed in thinner distance for some special causes. And a Souldier so placed taketh vp $2\frac{1}{4}$ cubits. But in *Denfation* or *closing* he taketh vp 2 cubits. ³ In *Constipation* or *shutting*, one cubit.

Denfation then, or *closing* is, when we draw wide distances close together, and by *side-men*, and *followers* (that is both in length and depth) gather vp the bodie of the Phalange: so notwithstanding that the souldier yet hath libertie to moue, and turne about.

Constipation, or *shutting* is when the Phalange by *side-men* gathereth it selfe yet closer together, then in *Denfation*; so that by reason of the nearnesse there is left no *Declination*, or turning of faces either to the right, or left hand.

The use of *Closing* is, when the *Generall* leadeth the Phalange against the enemy. Of *Shutting* when he would haue it stand fast (and as it were locked vp, and served) to receiue the charge of the enemy.

Seeing then there are 1024 *File-leaders* in the front of the Phalange, it is plaine that ⁴ in their ordinary array they take vp in length 4096 Cubits: (that is ten furlongs, and ninetie lix cubits) In *Closing* five furlongs, and forty eight cubits. In *Shutting* two furlongs, a halfe, and fower and twenty cubits.

Notes.

AFTER Souldiers are armed, and distributed into bodies military, the next care is to be had of their Mouing. For as a man, let him be neuer so well proportioned, and strong, if he pace disorderly, and either set too great strides, or reele here, and there, or so mince, and tread out his steps, as if his legs were bound together, groweth hereby deformed, and not enely lesse his comeliness, but his actiuitie withall, and possibility to performe any thing in strength: So is it of an Armie, that hath either too great distances, or is thronged up, or pressed too close together. ² Too much thronging bindeth, as it were, the souldiers hands, and taketh away the use of his weapons, as on the other side ³ falling one loose from another, and standing or mouing too farre asunder, maketh the Battaille weake, and disointed, and subiect to the enemies entry and easie to be broken. The meane betwixt both was brought in by King Philip, King of Macedonia, who first constituted, and raised the Macedonian Phalange, and inuented the distances of opening and closing the same; imitating the ⁴ setting of Targets (called Synapismos) practised by the old Heroes at Troy. Out of his discipline sprang the distances mentioned here by Aelian: which are of three sorts; The first are large distances of

a Cesar de bel.
gall lib. 2.
b Plutarch. in
Philopemene.

c Diodor Sic.
lib. 16. 511.

d Polybib. ix.
664 C.
Leo cap. 17.
§ 61.
e Polybib. lib. 17.
964 A.
f Leo cap. 7.
§ 14.

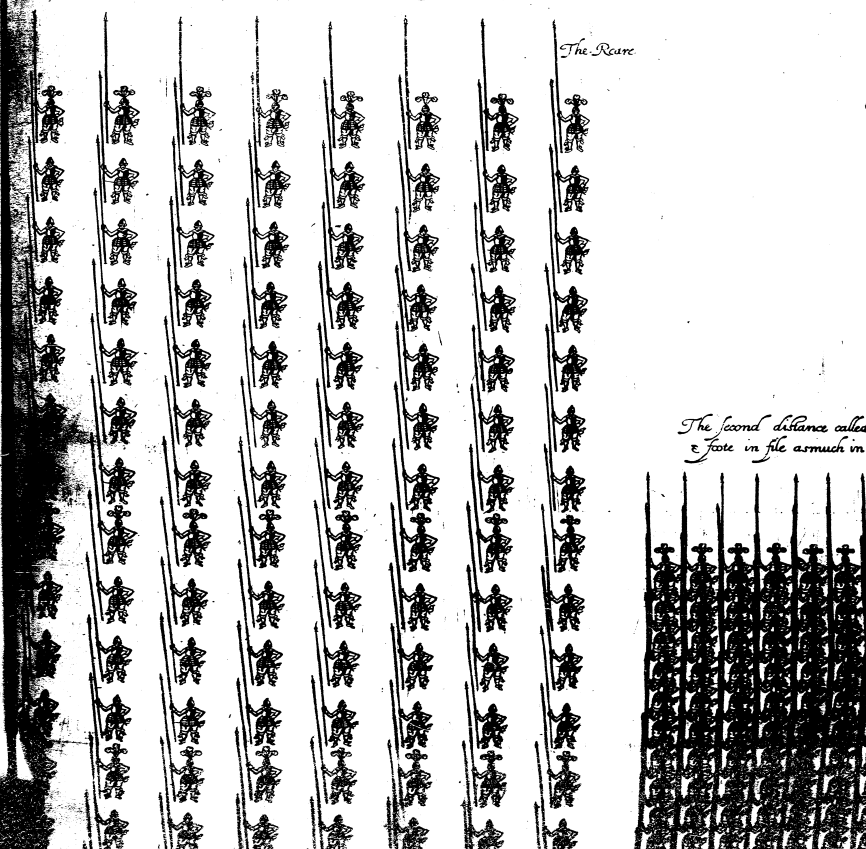
1. Four Cubits) Which amount to six fathoms. For a Cubit containeth a fathom and a halfe. This distance was used in marching, or else in Iohannes pompes and shewes. And the souldier hauing a pike of $6\frac{1}{2}$ cubits or 21 long, whereof one halfe lay forward on his shoulder, and the other halfe backward, it was requisite he should haue a reasonable large distance, both in file and ranke, ⁵ to the end, that in turning this way or that

1729,

The first distance ordinary of fathoms in file armish in ranke

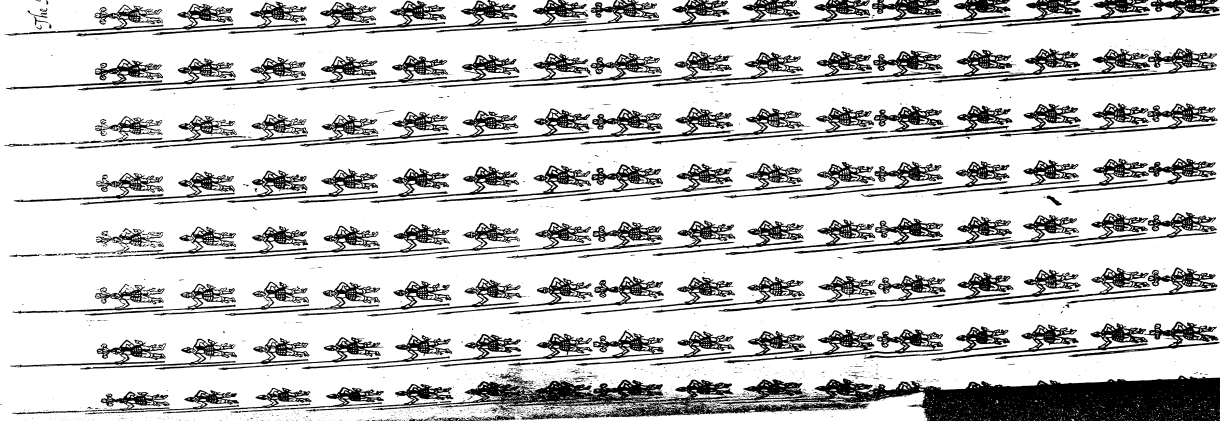
The Rear

The second distance called
a fathoms in file armish in



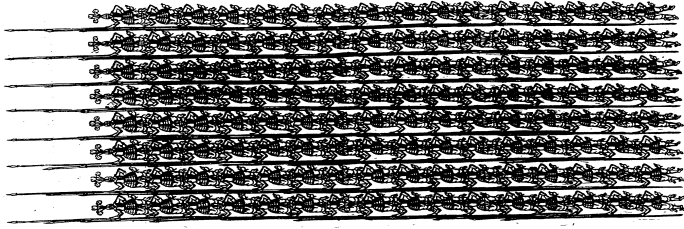
The first distance ordinary to take
in the armch in rank

The Rare.

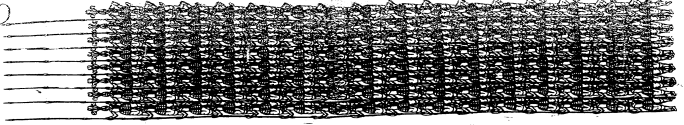


The Front

The second distance called *Drawp*
& *Foot* in file as much in rank
The third distance called *Shoulder*
& *Foot* in file as much in rank
to shoulder in rank



The third distance called Shells
or setting & take in the shoulders
to shoulder in neck



way, or that way, or moving out of his place (for no man in his marche can always hold his ranke) he offended not his next neighbours therewith. This distance our exercise at this day calleth open order. The next distance is of

Two Cubits] Or three foote. The name of it in Greeke is Pycnōis, that is thickning. In Leo it is called Sphinxis, (knitting together) in our moderne exercise Order. And it is, when from the distance of 6 foote, we draw our Phalange both by file, and ranke, so close, that the souldiers stand but 3 foote one from in other every way. This distance is used, when the Army approacheth neare to the enemy (and onely cometh not to charge) that it may be ready to stout, and locke it selfe for the charge, which is performed in the last distance of

One Cubit] A foote and a halfe. This is called Synaspismos, ioyning Targets to Target. For, as I before shewed, the pikemen of the Macedonians used also Targets with their pikes, and in charging the enemy closed so neare in front, that their owne Targets touched one another. This kind of fight the Egyptians used in Xenophon (which is called by Thucydides, and Herodotus) and by means thereof had the advantage against the Persians. The Parthian horse likewise coming to charge Crassus with their staves. After they perceived the depth of the locking of Targets, and the settlednesse, and stedfastnes of the Roman Phalange, they retired, and durst not come to hands with them. And Diodorus Siculus writes that Alexander besieging the City of Halicarnassus, there was in the City, and in service of Darius one Ephialtes an Athenian, a man of great valour, and strength of body; He by the permission of Memnon Generall of Darius Armie, determined to make a sally. And taking to him 2000 mercenarie souldiers, all chosen men, and giuing brands flaming with fire to one halfe, and reseruing the rest for fight, he opened the gates, and fell out, throwing fire vpon the engines of battery, which soone caught a mighty flame; And marshalling the rest into a thicke and deepe Phalange, himselfe led on, and was the first that fell on the Macedonians coming to aide, and to quench the fire. Alexander aduertised hereof speeded to the medley; & ordered first the Macedonians in front, after them other choice men, for seconds; and in the third place men of extraordinary account for their prowesse, himselfe leading them on sustained the enemy, which seemed vnersistible, and sent others to flake, and put out the fire, and to preferue the Engines. The fight was hot, and albeit the Macedonians found meanes to quench the fire, yet had Ephialtes the better in the fight; who both himselfe killed many with his owne hands, and the towers from the walls furnished with many Catapults annoyed greuously the Macedonians. In so much that some falling in the place, other some forsaking their ground by reason of the number of Engine Darts that fell thicke amongst them, Alexander himselfe was reduced to extremitie. Here the old souldiers of the Macedonians, although otherwise freed from such seruice in regard of their age, hauing of a long time followed the warres with King Philip, and gained many a battaile, were by this occasion tolled out to succour; and as they excelled the yonger sort in greatnes of spirit, and military experience, so meeting with the run-a-waies, they bitterly reuiled, and taunted them for their cowardice; Then *serring themselves close, and ioyning their Targets together, they repressed, and held the enemy short, who now seemed to haue the victory in his hands. Finally killing Ephialtes, and many other, they droue the rest into the City. A memorable seruice of the use of Targets, and of the Synaspisme of the Macedonians, which was not used, but when they either came vpon, or received the charge of the enemy. And the Targets so knit together served for a wall (as it were) to the whole Phalange, and by them the souldier

^a Xenoph. Cyrop. lib. 7. 178. A. ^b It is called by Thucydides, Senechis, Thucyd. lib. 5. 193.

^c Appian in Parthia. 1. 4. A. 104. D. C. ^d Diod. Sicul. lib. 17. 575.

* Synaspismos

was defended from the mischief weapon of the enemy, and his body covered even from the piercing of the sword. Synalpinus then, or sustinens, is that distance in the Phalange, which bringeth the soldiers Target to touch one another and is limited by Elian to a cubit (that is a foot and a halfe) betwixt side-men and side-men in the front. What distance the followers (should have, Elian setteth not more down in plain words; but implies, that they should hold their 3 foot still, in that he setteth the Phalange in conjunction gathereth the side-men closer, then in desolation, but speaketh nothing of followers. * Polybius teacheth more plainly; who gives them three foot distance from the Leader, both according to the Macedonian and Roman discipline, and that for the use of their arms: with

a Polyb. lib. 17. 744. A.

b Elian. c. 14. whom Elian also agreeth * afterward.

c See Polyb. lib. 11. 664. C. 2. c. cap. 17. 591.

d Suidas in Plutarch.

e Suidas lib. 8. Leo cap. 17. 592.

4 In ordinary array four thousand cubits] The Phalange in open order, saith Elian, takes up 4096 cubits of ground. This is to be understood in front, or length; for in depth it hath no more, then 64 cubits; every soldier (which are in number, 16 in file) possessing 4 cubits of ground in his open order; A cubit is the part of the arme, which reacheth from the elbow to the middle fingers end, and is as much, as a foot and a halfe. In front then, there being 1024 file-lengths, we must allett to each of them four cubits of ground; to the thousand 4000 cubits, and to the odde twentie four 96 cubits. For four times twentie four makes 96, which together comes to 4096 cubits, and to six thousand and one hundred fortie four foot.

5 Ten furlongs and ninety six cubits] Where this space is squared out by tenne furlongs, we must understand, that a furlong contains * four hundred cubits, and 4096 being divided by 400 the quotient is 10: — that is ten furlongs and 96 cubits, as Elian saith. Which measure of ground the Phalange of Armed taketh in open Order. Of these furlongs; * seven and a halfe to a mile, by which account the front of the Phalange of armed in open order taketh up one mile, a quarter, and 346 cubits, measuring it by feet is amount to 6130. In cloing (which is named Order, and is the next distance) because the soldier is allowed but 2 cubits, that is halfe so much, as in open Order, the dimension will not exceede five furlongs, 48 cubits; that is 2048 cubits in all, which amounts to halfe a mile, halfe a quarter, and 173 cubits, in feet, 3072. In slanting 2 furlongs and a halfe, and 24 cubits; that is a quarter of a mile and 274 cubits.

The arming of the Phalange.

CHAP. XII.

The Phalange is to be armed with Target and Pike. The best Target is the Macedonian Target made of brasse, and somewhat hollow, and having 3 eight handfulls in Diameter. The Pike ought to be 4 no shorter then 8 cubits; and the longest no longer, then a man may well vie and wield in handling.

Notes.

In the second Chapter of this booke is handled the diversitie of armes, used in the Phalange. This setteth forth the choice, that is to be made for matter and fashion, and what

what life is best of pike and target. For the other armor of the armed (whereof I speake, in my notes to the second Chapter) is (no question) to be fitted to the body of him, that shall be armed. He giueth then to the armed a target, and a pike, the targets the Macedonian target, was of brasse, and that they were called by reason of the bearing such targets Chalcipides Brasse-targets. I am induced to thinke, that, as Philip borrowed many other things in warre from the Lacedemonians so he borrowed this kinde of target from them. For they by the ordinance of Lycurgus, were enjoined to have no other matter in their target, then brasse. * Xenophon gives a reason why they were made of brasse. For Lycurgus was of opinion, saith he, that such a Target was most fit for warre, because it is soone brought to shine, and it gathereth not rust easily, two great commodities in armes. For a beitt the chiefest considerations be surenesse, and strength, yet it is not the beauty to be neglected, which shining doth principally set out. * Besides that it dazzleth the eye of the enemy, and strikes an amazement into his minde. * Xenophon much admireth Ageilaus, that he so armed, and clothed his armie, that they seemed to be nothing, but brasse, and nothing, but scarlet. The brasse he speaketh of, were the brasse targets of his souldiers, which covered the most part of the body, and were chiefly the object of the eye, without that, that any other weapon was at that time of Brasse. Therefore, as I said, I am of opinion that the brasse Target came from the Spartans to the Macedonians. The Brasse-targets Elian would have

3 Somewhat hollow] If they should beare straight out without any bowing, besides that they were uneasy, they would lie kicking out from the body, and not cover it much. The arme, or shoulder, that is inserted into the Target, is bowing. And the target somewhat bowing fits it for ease, and slopeth more toward the body to cover it, and is more pliable to be carried. But the hollownesse ought not to be much. He would have it also,

3 Eight hand-fulls in Diameter] The Diameter in a circle is a right line, which is drawne from one side of the circumference to the other passing thorough the Center, or middle point of the circle, dividing the circle in two equal parts: Here the Diameter of the target is taken for the exact breadth of the target, which ought to be, according to the Macedonian manner, eight handfulls, or two footes, that is 32 fingers. For four handfulls go to a foote, and four fingers to a handfull. * Leo gives it three Spithames, that is 36 fingers, if he mean the great * Spithame, which is of twelve fingers. And the lesse comprehending a handfull he cannot mean. For so should the breadth of the target be no more, but three handfulls, a breadth insufficient to cover any mans body. Whether of them the better will appeare in triall. The Diameter that serves to cover the body, from the upper part of the necke to the middle part of the thigh, is enough in these round targets. But, which is more, is rather troublesome, then fit for use. And I am of Iphicrates iudgement in targets, that performing the covering of the bodie, they should be as light, as may bee, least the shoulder be over-laden with unnecessary weight. In which regard I preferre the Target of Elian, before that of Leo; Elians reaching up to the height of the necke from the middle of the thigh; Leos carrying a handfull more in breadth, which in the circumference groweth to a good proportion of weight and greatnesse.

4 No shorter than 8 Cubits] That is 12 footes. Short pikes against long have a great disadvantage. With the long pike a man is able to strike, and kill his enemy, before himselfe can be touched, or come in danger of a shorter, the pike keeping the enemy out so farre, as the length is. The experience of the battaile of Sorano, sheweth it; where Vitelliozzo Vitelli discomfited the Almains only with the advantage of pikes an arme lib. 2. cap. 8. longer than theirs. Against long pikes, this policie was used by Cleonymus the Lacedemonian King, as 8 Polienus tells. Cleonymus besieging Adessa, and having over-throwne

b Plutarch. in Craſſo, c Xenoph. in Ageilaus. 619. B.

d Leo cap. 6. e Jul. Pollux lib. 2. cap. 4. f 32. callith it a panna.

g Patricius Pa. vel. part. fecimus arme lib. 2. cap. 8. h Polien. lib. 8. in Cleonym.

throwne the wall of the City, the pikemen of the City sallied out, whose pikes were each 16 cubits in length. Cleonymus closed his *Phalange* in depth, and commanded the file-leaders to lay away their pikes; and when the pikemen of the enemy came to charge, to seaze vpon their pikes with both hands, and hold them fast, and the followers to passe thorough by the file-leaders sides, and maintaine the fight. The file-leaders laid hold on the pikes, and the enemy stroue to recover them out of their hands. In the meane time, the followers passing thorough the ranke of file-leaders to the front, slew the enemies pikemen, and got the victorie. This was Cleonymus deuise against long pikes, which notwithstanding derogates nothing from the length of pikes more, than from shortnes. For the same policie might haue preuailed as well against short pikes, as long, each, as soone as the enemies haue seized vpon them, growing to be of no vse. But that the longer pike is to be preferred before the shorter, I haue shewed before by reason: and the reformation of armes made by Iphicrates amongst the Athenians, and by Philopomen amongst the Achaians, will be warrant enough so to hold. In the length notwithstanding ought to be a reasonable consideration, that it exceede not the measure of his strength, that shall beare the pike.

*The worth that the File-leaders, and next followers
should be of*

CHAP. XIII.

THE File-leaders (as the Commanders of files of the *Phalange*) are to be the choice and flower of the Army, and to excell the rest as well in stature, as in experience and martiall skill. For this *Ranke* knitteth and bindeth in the *Phalange*, and of all other yeeldeth greatest vse. For, as a sword taking to the edge as a weight, and fway, the swelling yron towards the backe exhibiteth thereby more violence in piercing, so in a *Phalange* the *Ranke* of File-leaders is the edge it selfe, and the multitude of after-commers is the swelling, and fway, and increase of weight.

Consideration must be had likewise of those that follow in the second *Ranke*. For their *Pikes* reach ioyntly ouer the *front*, and being next in place they are alwaies ready for vse. And the File-leader falling, or being wounded, the next follower stepping to the *front* in his place, holdeth together, and preferueth the tenor of that *Ranke* vnbroken.

Furthermore, we are to order the third and the rest of the *Ranks* according to reason, and as the valour of our souldiers shall require.

THIS Chapter sheweth how the Souldiers are to be ordered in every File: whereof, because I haue before spoken sufficiently in my Notes to the fifth Chapter, and the words of this Chapter carry no difficultie, or obscuritie with them, I will forbear to treat any further.

CHAP. XIII.

Phalange.

The Macedonian Phalange, hath beene thought to be vnrefutable. The strength of the Macedonian Phalange appeareth no way better, than by the conquests it hath made. King Philip was the inuenter of it, and by that inuention raised the kingdom of Macedonia from the poorest, to the powerfulest, and greatest kingdom of Europe; and (that I may use the words of *Diodorus Siculus*) finding the Crowne of his comming to it, in bondage to the *Illyrians* made it afterward Lady of many great Nations, and Cities; and purchased to himselfe, to be declared Generall of Greece.

throwne the wall of the City, the pikemen of the City sallied out. whose mil-

Cap. 14.

Pikes reaching
over the Front

The Front

I THE CHAPTER PERTAINING WITH THE SOLDIERS ARE TO BE ORDERED IN EVERY CASE: WHEREOF, because I have before spoken sufficiently in my Notes to the fifth Chapter; and the words of this Chapter carry no difficulty, or obscurity with them, I will forbear to treat any further.

CHAP. XIII.

Of the strength of the Macedonian Phalange, and length of the Souldiers Pikes.

CHAP. XIII.

THE ¹ Macedonian Phalange hath of enemies beene thought vnresistible, by reason of ² the manner of embattailing. For the Souldier with his Armes standeth in close order, or shutting, when he is ready for fight, ³ occupying two Cubits of ground. And the length of his Pike is sixteene Cubits according to the first institution, but in truth it ought to be foureteeene Cubits; whereof the ⁴ space betwixt the hands in charging taketh vp two Cubits, the other twelue lye out from the front of the Battaille. Those in the second Ranke, that stand next to the Leaders (looting foure Cubits in the Phalange) haue their Pikes reaching ouer the first Ranke ten Cubits. Those of the third Ranke eight Cubits, of the fourth Ranke six cubits, of the fifth 4 cubits, of the sixth 2 Cubits. ⁵ The Pikes of the other behind cannot attaine to the first Ranke. And seeing five or six pikes are charged ouer the first Ranke, they present a fearefull sight to the enemy, and double the strength of the souldier standing fortified, as it were, with five, or six Pikes, and seconded with a maine force at his backe, as the figure sheweth. Moreover they that are placed after the sixth Ranke, albeit they push not with their pikes, yet thrusting on with the weight of their bodies, reinforce the strength, and power of the Phalange, and leaue no hope for the File-leaders to flie, or shift away. Some would haue the hinder pikes longer, then the foremost, that they of the third, and fourth Ranks might beare out the heads of their pikes equally with the first.

⁶ The Superordinary Lieutenant of euery Syntagma must be a man of vnderstanding, ouerseeing the souldiers of his command, that they file, and ranke; and if he see, or other occasion, any forsake their ground, he is to compell them againe to their places; and in closing to put them (when neede requireth) as neare vp together, as they should stand. For it is a great strength, and assurance to the Phalange, to haue some principall Commander not onely in front, but also in the Rear of the Battaille, for the causes before mentioned.

Notes.

THE strength of the Macedonian Phalange, which consisted principally in the ¹ protection, and charging of pikes, and knitting together of Targets, is here a Appian. in set downe. The whole Chapter seemeth to haue beene taken out of ² Polybius, who hand- Syntaxis 97 E. leth the same argument, and almost with the same words, but that Ælian, and he differ about the number of Cubits, which the Pikes take vp reaching ouer the front of the Phalange. Polyb. l. 2. c. 17.

³ The Macedonian Phalange, hath beene thought to be vnresistible. The strength of the Macedonian Phalange appeareth no way better, than by the conquests it hath made. King Philip was the inuenter of it; and by that inuention raised the kingdom of Macedonia from the poorest, to the powerfullst, and greatest kingdom of Europe; and (that I may use the words of ⁴ Diodorus Siculus.) finding the Crowne, c. Diod. Sicul. l. 16. § 10. at his comming to it, in bondage to the Illyrians made it afterward Lady of many great Nations, and Cities; and purchased to himselfe, to be declared Generall of Greece.

H

d Diodor. Sic.
lib. 17. 162.
Plutarch in
Alexand. 9.
Qla Curt. de
re. 8. 6. 11.
Aster.
Iulian.

e Diod. Sicul.
lib. 16. 141.
Iust. lib. 8.
f Dio. Sicul.
lib. 16. 155.
Plutarch in
Telephid.
Iulian. lib. 5.
g Diod. Sicul.
lib. 17. 162.
h Qla Curt. de
re. 8. 6. 11.
i Polyb. lib. 6.
141.
k Polyb. lib. 17.
763. D.

l Plutarch. in
Flamin.

m Plutarch in
Pyrrho.
n Polyb. lib. 9.
766. C.
o Plutarch. in
Flaminio.

p Appian. in
Syriacis. 107. D.

q Plutarch in
Amulio.
r Livy dec. 5.
lib. 4. 72.

Greece. And first overthrowing the *Illyrians*, *Peonians*, *Thracians*, and *Scythians*, afterward set upon the kingdom of *Perfia* to breake it, after he had enfranchised the *Grecian* Cities of *Asia*. And albeit death intercepted him, yet he left such forces to his sonne *Alexander*, that he needed no other *Aides* to overthrow the Souerainity of *Perfia*. After his death ^a *Alexander* tooke his kingdom, and *Armie*, and with it encountering, and vanquishing *Darius* in two great Battails, runne thorough *Asia* like a flash of lightning renting a pieces all, that resisted, or stood in his way, and laid the foundation of that kingdom, which (albeit afterward diuided) continued long in his Successors. Neither was the experience of their invincibleness against the barbarous people onely, but as much against the *Grecians*, who till Philips time were esteemed the chiefe masters of *Armes* in *Europe*. This is cleare by the victories, the *Macedonians* obtaine against the renowned Cities of *Greece* both jointly and severally. ^b Philip overthroweth the *Phoceans*, albeit the *Lacedemonians*, and *Athenians* joined with them. The same ^c Philip at *Cheronza* defeated the power of the *Thebans*, and *Athenians* joined together. ^d Alexander tooke and sacked the City of *Thebes*, that about that time was accounted the mightiest City of *Greece*. ^e His Lieutenant *Antipater* foyled the *Lacedemonians* in a set battail, and slew their King *Agis*. ^f Antigonus Tutor of King Philip the sonne of *Demetrius*, broke an *Armie* of the *Lacedemonians* and *Peloponnesians* at *Selafia*, and chased out of *Greece* *Cleomenes* the last brave King of *Sparta*. Briefely they were not beaten in the field by any Nation, but onely by the *Romans*. And yet the iudgement of ^g *Polybius*, doth in this also proue it selfe good. For where the *Romans* had these victories against the *Macedonians*, he assigneth this to be the cause, that the *Phalange* at the time of the fight had not the proper place, nor means to vse it owne power in the encounter; so long as the *Phalange* hath ground enough, and can meete the enemy with a right front, he holdeth it not possible to be foyled, being diuided, and in places uneven, he is of opinion, and experience hath taught, it may easily be put in a route. ^h *Plutarch* compareth it for strength (so long as it is one bodie, and maintaineth the *Synapsism* jointly) to an invincible beast; being disseuered, he saith, it looeth the force in the whole, and in euery man particular; both in regard of the manner of arming, and also because the violence of it consists rather in knitting of all parts together, than in particular of any mans valour. Three battails (so pratermit diuers skirmishes,) I finde the *Romans* had with, and therein foyled the *Macedonians*; One against King Philip, the sonne of *Demetrius*; an other against *Antiochus*, the third against *Perseus* the sonne of King Philip. ⁱ For I passe ouer those, wherein they were beaten by *Pyrrhus*, and had the worst. ^j Philip breaking his *Phalange*, and not using the whole together, but fighting against the *Romans* with the right wing onely, yet had the better, and was too hard for that part of the *Roman* Army, that joined with him; but the other wing coming into the field, fit rather for a march, than a fight, and not being able to order themselves: *Phalange*-wise, were soon defeated, and the *Roman* victors, fell upon the reare of the right wing (where Philip was, and had now gotten the victory) and so wonne the field. ^k *Antiochus* vskilled in true order of a *Phalange*, trusted rather to his horse, than his *Phalange*, and being to fight with *L. Scipio*, where he should haue giuen full scope, and extended the front of the *Phalange*, by making it 16 deepe, he contrary-wise narrowed it, drawing out the depth into 2: whereby he lost the advantage of matching the front of the *Romans*, and after his horse were beaten, gaue facilitie to the enemy of encompassing on it all sides. ^l *Perseus* joining battail with *Paulus* *Emilius*, as long as the *Phalange* continued in the right figure, slew many of the *Romans*, and forced them to retire, but following on too eagerly, he came to con-

enue

enue, and rough ground, wherein the *Phalange* being disseuered, left spaces, and breaches for the *Romans* to enter and defeat it. So long then, as the *Macedonian* *Phalange* had fit ground, and the right property of embattailing, it stood fast against the *Romans* the greatest soldiers that euer were, being in their hands, that knew not how to vse it (as a sword in the hands of a child) it yielded to time and fortune. The cause of the strength of the *Phalange* is assigned to be

2 The manner of embattailing] Which consists principally in ordering of Targets, and pikes; in cloing of the Targets by *Synapsism*, and in joint charging of the pikes; which lying out thicke from the front, beastes the horror of the sight, give almost an impossibilitie to enter the *Phalange*. I haue alledged the iudgement of ^m *Emilius* concerning the sight presented by a *Phalange*, when the Pikes lie so charged out of the front. ⁿ *Polybius* thinketh nothing can resist the force thereof. ^o *Livy*, albeit many times more than partiall to the *Romans*, yet in the selfe-same fight betweene *Perseus* and *Emilius* giueth his iudgement thus of the *Phalange*: The second Legion (saith he) inlinuated it selfe into the middle empty place, and so broke asunder the *Phalange*. Neither was there any more euident cause of victory, then the fights in diuers places at once, which first troubled the *Phalange* in turning many waies, and afterward plainly disioynted; and scattered it, whose forces being vnited and rough with charged pikes are intollerable. If by giuing on in diuers places you constrain it to bring about the pikes immoucheable through length and weight, it entangleth it selfe with confused crossings. If at one time you charge it both flanke, and reare, they fall asunder like a ruinous building. As then they were compelled many waies to answer the *Romans*, and so to breake their battail into many parcells. And the *Romans* vpon the first opportunitie of a breach straight waies conueighed in their troups, who if they had met the enemy in front, had runne vpon the pikes, as in the beginning it hapned to the *Pelignans*, being too forward to come to hand, and could not haue resisted the *Phalange* fast shut, and serred vp for the encounter: thus *Livy* concerning the *Phalange*. ^p *Vitis Aelian* a *Roman*, holdeth the same opinion that *Polybius* doth. ^q And in another place telling of Philips encampment, he saith, he was lodged in a woody place, which was vnfit for the *Phalange*, especially of the *Macedons*, which vnfit it cast the pikes, as it were, a muniment before the Targets, (and that cannot be, but in open ground) is of no great vse. So then if Pikes may be charged out before the Targets, the *Phalange* is of great vse. But, that I may not seeme, to rely vpon bare opinion, let vs heare by an example, or two, the experience of the Pike, and Target of the *Macedonian* against the *Roman* armes. ^r When *T. Quintus* *Flamininus* the *Rome* Consul had drinen King Philip, and his Army from the *Streights* neare *Antigonis*, seeing that the enemy kept himselfe with his strength, and abstained from the field, he determined to try the Cities of *Thessaly*; and hauing wonne some by force, some by feare, he came before *Blage*, and besieged it. He found the siege longer, and more difficult, then any man would haue thought. And the enemy made his resistance, that way, the *Consul* would hardly haue beleueed, he could. For he imagined that all his labour should be in throwing downe the walls. If once he found passage for the Army to enter, there would after be nothing else, but flight and laughter, as is wont in wonne Cities. But after that part of the wall was throwne downe with the Ramme, and the Army entered the City by the breach, it was the beginning of a new, and fresh labour. For the *Macedonians*, that were there in Garrison, being many, and chosen, thinking it also a glory to them, if they could defend the City, rather with

H 2

armes

^m Plutarch in
Emilio.

ⁿ Polyb. lib. 17.
^o Livy Dec.
5. lib. 5. 73. C.

^p Livy Decad.
4. lib. 1. 118.

^q Livy Decad.
4. lib. 2. 30. C.

armes and valor, than with walles, *ferring* themfelues close together in a deepe *Phalange*, when they perceived, that the Romans began to enter the breach droue them out, the place being cumberlome, and hard to make a retreat. The *Confus* much offended therewith, and thinking that (same concerned not only the delay of winning one Citie, but also the state of the whole warre, (which for the most part dependeth vpon moments of small matters) purging the place which was beaped vp with the fall of the halfe-ruined wall, aduanced a Tower which in many stories was stufed with multitudes of armed men, and sent besides *Cohors* vnder their Ensignes to breake vith maine force (if it were possible) the body (they call it the *Phalange*) of the Macedonians. But the kinde of weapons and light was more aduantageous for the enemy, than for the Romans; especially in that place, which was narrow, and streightned with the small space of the ouerthrowne wall. When the Macedonians, *ferring* themfelues close, had charged pikes of a great length before their front, and the Romans, after their darts throwne in vaine against the *testudo* compacted, as it were, of the thicke knitting together of the Targets, had drawne their swords, they could neither come vp close, nor cut a funder the pikes. And in case they cut the heads of, or broke any, the steale amongst the rest of the whole pikes filled vp the roome with their sharpe fragments. Toyné that that part of the wall, which was yet whole, secured the enemies flanks on both sides; neither needed they much ground in retiring or advancing to charge, which things are wont to cause the breach of array. There also fell out a chance which increased their hopes, and spirits. For the Tower being driuen on vpon a rampter, that was not well rammed vnderneath, but had loose earth, one of the wheelles sinking deeper into the ground than the rest, made the Turret to nodd, & lie of one side, that both the enemy beleued it would fall, and they within it were put in a pitifull feare. When nothing succeeded well, the *Confus* was euill appaied, that the Macedonian soldiery, and kinde of Armes, might seeme matcheable to his, and seeing no great hope of speedily winning the Citie, and that the place was vnfit to winter in, raised his siege. *So here the Macedonian souldier is not only equalled, but also preferred before the Roman, and that only by reason of his armour, the Pike and Target. Another experience fell out in the battaile betwixt Perseus, and Emilius, whereof I spake in this Chapter. The storie is this:* The Romans comming to ioyne battell with the Macedonians, and not able to come vp to them by reason of the length, and ioint ouer-bearing of their pikes. There was one *Salius* a Capitaine of *Pelignans*, who tooke the Ensigne of his Company from the Ensigne-bearer, and threw it into the Macedonian *Phalange*. The *Pelignans* ranne in heapes to the place (for it is not lawfull, nor honest, for the *Italians* to forsake their Ensignes) where the medley brought forth wonderfull effects. For the *Pelignans* fought with swords with words to put by the pikes, and to presse them downe with their Targets. And seeing vpon them to pull them out of the hands of the Macedonians. The Macedonians contrary wise, maintaining their charge with both hands, and striking such, as approached neare, thorough the bodies, at mes and all, neither *Target* nor *Carace*, being able to sustaine the violence of the blow, turned topsy-turvy the bodies of the *Pelignans*, who not with reason, but with the rage of wilde beasts, threw themselves desperately vpon wounds, and vpon certaine, and fore scene death. So the foremost falling, the followers began to slacke. And yet they fled not, but retired to the mount called *Olacras*. *I will out of Appian ioyne a third experience in the battaile of Antiochus*

Perseus in Syria.
Emilius.

Appian. in Syria.
racia. 109. B.

against

again? L. Scipio, which likewise touched before in this Chapter. As soone, as the Horse, and Chariots of *Antiochus* were put to flight by the Roman horsemen, and by *Eumenes*, his *Phalange* of foote being delittute of horse, first opened, and received the light-armed, (that had all this while fought in the front) into the midst of it. Then after-ward againe closed. And when *Domitius Scipio's* Lieutenant, encompassed it round with horse and light-armed, which he might easily doe, by reason it was thrust vp into a thicke *Plinthum*; it was driuen to great distresse; being neither able to charge the enemy, nor yet to countermarch in so thing auailed them. It grieved them much, that their long experience notwithstanding to annoy the enemy, and that notwithstanding they were on euery side of their square, they called the Romans to come to handy blowes, and still made a countenance, as though they meant to charge, keeping them, and the rather, because they had to doe, with an enemy on horse-backe. Besides they were loth to breake the thicknes of their battaile, which forme they could feare their experience in warre, and closeness of array, and desperation. But none was throwne in vaine, falling amongst a troupe so closely put vp together, be it they could neither auoide, and decline any thing throwne, nor giue way, al- they retired easily, with a threatening countenance notwithstanding, and in good order, and not deliuering the Romans of feare, who durst not yet come neare, but sought to annoy them aloofe; till the Elephants placed in the Macedonian *Phalange*, being affrighted, and not to be ruled by their Gouernours, troubled all, and gaue occasion of flight: *hitherto Appian. Out of these three examples, the truth of that, which Ælian saith, is to be seene, that is, that the Macedonian Phalange can not be forced, or resisted by an enemy, (taking with all Polybius his caution) if it be in the right posture, and figure, and haue such ground, as is fit. The Romans the best souldiers of all antiquitie were repulled by it at a siege, forced to retire in a battell, durst not come neare it, after they had gained the field of the rest of the Army. And the Consul Emilius, a man that had seene much seruice, and fought many a battaile, and was one of the best Generalls of that time, confessed, he neuer saw so fearefull a sight, as when he beheld the *Phalange* advancing into the field, the bodies ioynd, the Targets fered, and laced together, darting out fire like lightning, the front rough with couched, and charged pikes, and armed with yron, and threatening present death to him, that durst approach.*

3. Occupying two Cubits of ground] *We may not take it, as though the souldier betwixt file, and file had two Cubits, or three foote of ground. For we learned before, that in locking vp the Phalange, the distance betwene man, and man in front was but a Cubit. But it is to be understood betwene ranke and ranke. For Polybius saith, that the souldier ought to haue roome for the rise of his weapon, which cannot be, without granting him three foote behinde, the pike being sometimes to be pushed forward, sometimes to be drawne backe, sometimes otherwise handled, as occasion of fight shall require.*

The length of the Pike is 16 Cubits] *Sixteene Cubits, which is twenty six Leet esp. 5. foure foote, is a great length for a Pike, and it verifieth the words of Livy, §. 3. & cap. 6. that the Macedonian Pike is vnwealdy, by reason of the length, and weight.*

Polyn. lib. 2. in Cleon. mo. 52. e Xenoph. hon de repta. c. 17. lib. 4. 38. & d. Pol. lib. 1. 17. 764. A. e Polyb. 17. 764. A. f Leo cap. 6. 139.

yet doe wee read of pikes of that length. The ^b Edessians had such. The ^c Chalybes pikes were about 15 cubits long. ^d But 16 was the length at the first, the Macedonians brought it to 14, which they took to be a sufficient length against the enemy, and easier for the pike-man to beare and handle.

The space in charging betwixt the handes taking vp two cubits [Herein is a difference betwene ^e Aelian, and Polybius. Aelian would haue no more, then 2 cubits lost in charging; ^f Polybius saith 4, are left, and with Polybius agreeth Leo. But the cause of the difference ariseth out of the forme of the pike, and of the manner of holding it in the charge. If it be held at the butt end with the right hand, and supported toward the arm'd end with the left, as the manner in charging is, it cannot lose above two cubits, and Aelian is in the right. But if, in holding it, you set the right hand 2 cubits from the butt end, then must 4 cubits of necessitie be left. Whereof 2 rest behinde the right hand, the other two are taken up by the space betwixt both hands. Our manner of charging is at this day, to take the butt end in the right hand, and in so doing we loose but two cubits. But it seemeth our pikes are not made in this forme, they were in Polybius time. In Polybius age they had weight as at the butt end to make the sharpe end the lighter, as the heauie pummell lighteneth the sword in handling. ^g This weight was called ^h secoma, as it were a counter-weight to the heauinesse, and length of the pike. Neither do I read any thing elsewhere then in Polybius, concerning the counter-weight of a pike. To the handle of an Oare, I finde in ⁱ Athenus, that lead was added, to make the part standing out from the shippe more light. But yet Polybius, and Aelian's opinions may well agree, and in pikes that haue counterweights at their ends (the bold for charging being taken two cubits from the butt end) there may be lost foure cubits, where the other sort being held as the butt end it selfe, loose but 2 cubits.

The pikes of the other behinde, cannot reach to the first ranke] How shall they beare their pikes then? ^k Polybius sheweth, what the manner was. Tholerantes, saith he, that stand behinde the fifth, can helpe nothing to the fight in front. And therefore they charge not their pikes low, but beare them towards their fore shoulders, the points somewhat erected to secure the battaile from above, intercepting by their thicke lying the misse weapons, which flying ouer the front, would otherwise fall vpon their heads, that are placed toward the reare. Polybius saith, the manner was, (neither to charge, nor order their pikes, but) to beare them forward, sloping towards the shoulders of their companions before. Yet by bearing them so, what security they could crie from the misse weapons, that came aloft, I cannot yet conceiue. An arrow, dart, or stone, willasse if hit iust on the middle of the pikes, would do as much, and sometimes more, harme by glancing, then if it had not touched them at all.

Some would haue the hinder pikes longer] The opinion of them, whom Aelian here speaketh of, hath little reason to ground vpon. For either the pike of them that come in the first ranks behinde, especially the two last, must exceede in length, or else the file-leaders pikes in shortnesse, both which are alike vnpromissible. If they bee too long, they cannot be wielded, if these too short, the enemy shall reach the file-leaders, and not the file-leaders the enemy. The measure of the longest pike was 16 cubits, which yet for aptnesse and ease was by the Macedonians reduced to 14. Say then the sixteenth ranke carryeth pikes of 16 cubits; two of the cubits according to Aelian, are taken away in handling, other ten by reason of the distance of the five former ranks. Foure cubits alone remaine, and reach ouer the front. If the file leader in the front shorten his pike to foure cubits to make an even extension, he shall not come neerer the enemy by ten cubits, who in pushing will reach home to him. For what length stauer, is taken from the file-leader in front,

front, the same is giuen to the enemy, that pusheth with him. And hee shall be able to wound the file-leader, and not the file-leader him, especially the pikes differing in so great a proportion.

The superordinate Lieutenant of euery Syntagma] I haue before noted the dutie of a Lieutenant of the Syntagma, and it is here well expressed by Aelian. He, that desireth to see more touching the same, let him resort to Xenophons Cyropædia: lib. 3. 28. and lib. 7. 178. B. and to Leo, cap. 14. § 79.

The place of the light-armed, and the number of euery file.

CHAP. XV.

Thus much of ordering and marshalling the armed-foote. I will adde a word, or two, of the light-armed, or naked. The Generall is to place the light-armed so, that they be readie for all attempts of the enemy, sometime in front, sometime in flanke, sometime in the Reare, according to occasion or necessity. For our purpose let them be thus ordered: We will frame also of them 1024 files as many, as the Phalange of the armed contained; So that the first file of the light-armed be placed directly behinde the first file of the armed, and the second file behinde the second, and so the rest. Yet shall they not be sixteen to the file, but halfe so many, namely eight; so that in 1024 files there shall bee eight thousand, one hundred, ninety two men.

Notes.

1. ^Hitherto all things concerning the arming, filing, embatteling, number, commanding, distance and precedence of the armed are declared; and likewise, of the arming of the light and somewhat of their place. Now followeth the filing, ranking, and place more exactly, and their manner of embattailing, with their severall bodies, and commands.

The Generall is to place] I haue spoken somewhat before of the placing of the light. I will now onely adde a passage of Leo tending therunto. Leo saith thus, you shall range the Archers behinde the reare of euery file according to the number § 69. of the file, (that is foure light for twenty six armed, proportioning an Archer for euery foure armed. Or if it be needfull, you shall order them within the files, an armed, and an Archer. Sometimes without the wings of the battaile; that is within the Horse. Oftentimes without the Horse a little distance, with a few Targetiers, to defend the vntermost flanks of the Horse. And this is to be done, when you abound in multitude of light-armed. But those, that vie small darts, and iaculins, and such like are to be placed, either in the reare of the armed, or in the wings of the battaile, and not in the middle. The slingers are alwaies, to be set in the wings. Thus Leo placeth his light armed. But Aelian here (as before in the seventh Chapter) designeth their place in the reare, but so, that hee leaueth it to the Generalls choice, and to the occasion of service to place them, as most befiteth. Being (as behinde, as Aelian order is, they must answer the armed in number of files, & be directed by the files of the armed for their standing; that is euery file of the light-armed is to order it selfe in a right

The Tactics

right line after a file of the armed in such manner, as the armed are before embattailed.

Elia in the beginning divided the foote into three parts, Armed, Targetiers, and light-armed. To the armed he hath given place, and maketh the Pitalange to consist of them, the light-armed he rangeth in the reare of the armed, what shall become of Targetiers? for he speaketh not a word of placing them. By that I read in Artian I would think they were placed amongst the light-armed, and next to the armed. First because Elia in his sixth, many number them among if the light. Then I see the Hypaspists placed betwixt the Horse, and the armed in Alexanders fields at Granicus, at Illos, and at Gaugamela; Lastly Leo in the passage before recited, when he placed the light-armed without the Horse, he joineth Targetiers with them, for their safeguard. Cyrus likewise placeth them next the armed in the reare, and after them the Archers.

2 Yet shall they not be 16.] The file of the light-armed is lesse in number, then the file of the armed. For if they should be 16 in file, the number being but halfe to the armed, they should not be able to make above 512 files, and breeding there by a disproportion both in placing, and correspondence one to an other, was equall the length of the Phalange. Besides standing eight in file, and in the reare, their flying weapons will bee sent with more force against their enemies, in as much as the hindermost of them are nearer the enemy by twenty foure paces, which the last eight in a file of 16 deepe take up. And misse weapons, the lesse their compass is, when they are sent against a mark, with more violence they pierce. As they hurt not greatly, if the distance be too farre, from whence they come.

The names of the bodies of the light-armed.

CHAP. XVI.

Their names and degrees are these. Foure files of light-armed are called 2 a Syssais of 32 men. Two Syssais a 2 Pentecostarchy of 64 men. Two Pentecostarchies 3 a Century of 128 men. In every Century ought to bee 5 Superordinarie men: an Ensigne, a Reare-commander, a Trumpeter, a Sericant, and a Crier. Two Centuries containe 256 men, and are called 4 a Pylagy. Two Pylagies a Xenagy of 512 men. Two Xenagies a Syfremma of 1024 men. Two Epixenagies a Stiphos of 2048 men. Two Stiphos an Epistagma of 1024 files, 8192 men. These ought also to haue 8 Superordinarie men, whereof foure should bee Epixenagies, the other foure Syfremmarches.

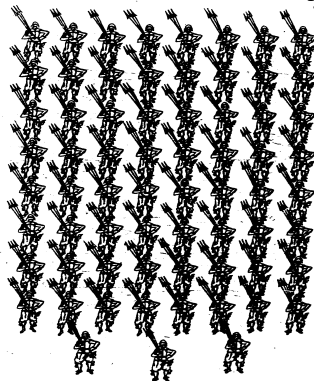
Notes.

As the armed were distinguished, and severed into diuers bodies in the Phalange, so are the light-armed, in whom there ought to be no lesse order, then in the armed. A multitude undigested bringeth with it disorder, and confusion. Neither can any service be expected from them, who by apt divisions are not cast into bodies fit for service. We haue before spoken of the names of the bodies of the armed, and noted, that they were not imposed with such propriety, that they could be applied to no other thing. At the first warre was made, and men fought (as wild beasts) together, led with fure, and rage, and not with shew: and he presumed that was the strongest. Experience taught there were advantages in Time, in Place, in Order, in instruments of fight, in placing of men, and in

A Syssais



A Pentecostarchy



The light Armed



The Front

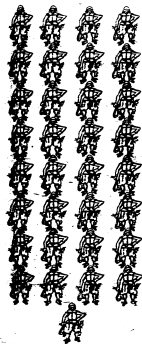
ed are before embattailed.
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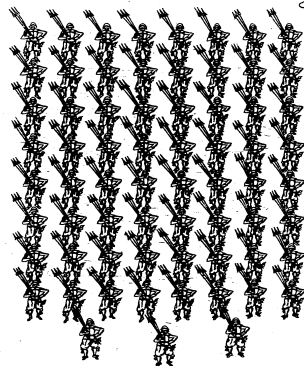
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A Syllans

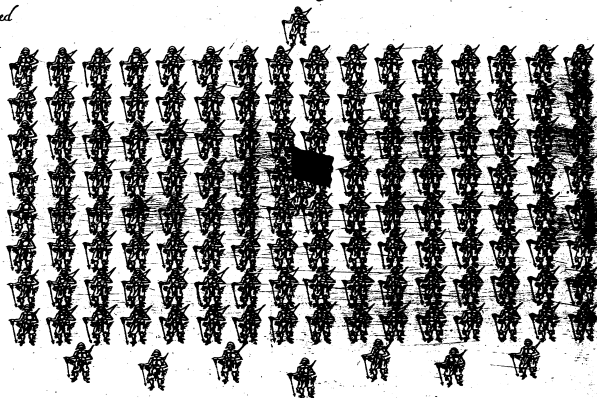


A Panti-conarchy



Cap 16

The light Armed



A Century

The Front

in other circumstances. Hence sprung the Art of Warre, the diuers formes of weapons, and the figures of Battalies. For the speedy framing whereof, the smaller bodies were invented, of which they consist. In building of a house, you first bring timber together, and other matter, and then of it frame walls, dories, windowes, rafters, beames, and the roof, which must be all conioyned together, before the fashion of the house will appeare: So in an Army the prouision of men was first requisite, which being found, and brought together by Leauies, were armed, and after ordered into severall bodies; and these being compassed together, set out the frame and fashion of the Phalange. And as all things newly invented, stand in neede of names to ascerne them from other things; So names were giuen vnto the bodies not proper and fit; but such as military wits thought convenient enough to signifie the things they meant. I haue noted it before in the names of the Tetrarchy, Taxis, Syntagma, and other, and it will appeare againe in this Chapter.

But here I may not pratermit the curiositie of the Græcians in their appellations, and their plenty of speech, apt to giue diuersitie to things, that are diuers. For where there are bodies, amongst armed, and light-armed, which consist of the same number, and therefore, as it seemes, might well enough haue bene comprehended vnder one name, they notwithstanding to auoid confusion, and for perspicuities sake haue thought good to call them by sundry names. Thirty two armed men are called a Dilochi; 32 light armed are a Systalis; 64 armed are a Tetrarchie; 64 light armed a Pentecontarchie; 128 armed a Taxis; 128 light, a Hecatontarchie. Our tongue will not afford such variety. For albeit in common speech we distinguish the kinde of souldier, yet confound we the name of the body, and of the command. A certaine number of Pikes vnder a Captaine we call a company of Pikes; So many shot vnder a Captaine we likewise call a company of shot. The Capitaines, one a Captaine of Pikes, and the other a Captaine of shot. A company of Curacers of horse, we call a troope of Curacers; as many Argoleters, a troope of Argoleters. The Commanders of either of them we name Capitaines, the same of Curacers, the other of Argoleters. But let vs come to particular explication.

1 A Systalis] It cometh of Synistemi to stand together: and a systalis is a standing together, which word albeit it may be extended to any kinde of people assembled, and standing together; yet it is here appropriated to souldiers; and more particularly to 4 files of light armed, consisting of 32 men, 8 men going to the file.

2 A Pentecontarchie] The command of 50 men. And so it was vsed of olden. But the Macedonians gaue 64 men to this command, and yet retain'd the name, because it was familiar, and well knowne.

3 A Century] *Ælian* calleth it a Hecatontarchie, the command of a 100 men. The name was vsuall before the Macedonians time, and it coneyned 100 men. But the Macedonians gaue it 128 men. This was answerable to the Syntagma amongst the armed, and had the like officers. Yet whether it had a Captaine, or no, may be some doubt; the rather because *Ælian* in this Chap. nameth no Commanders, but Syntrematarchs, and Epixenagies; and those he would haue super-ordinary. For my part, I thinke they had Centurions also. For as every body of the armed had a head, I would thinke it requisite also amongst the light-armed, especially seeing there was a Bringer-vp, and other officers belonging to a Company; which unless they had a Commander, would become vnprofitable. For if there were no Captaine, to whom should the Crier, or Trumpet, or Sergeant of the Centurie resort for direction? Adde, that the light were often drayne to the wings, to the front, or other places of service, which could not be done without Leaders. For to put a Syntrematarch, or an Epixenagie to lead a Century, were to leaue the rest of the Centuries vnder them without a Commander. Besides, the

a after ap. 30.

b Xenoph. de
exped. Cyri.
lib. 1. 170 D
c Xenoph. de
exped. lib. 4.
331 D
d Arrian. lib. 1.
9. C.
e Arrian. lib. 1.
75.
f Arrian. lib. 1.
23 B.

the Macedonians were very particular in their commands, and left no body without a head; which is the cause of the multitude of Commanders in the Phalange. But they are not here mentioned. No more are the ^a Commanders of the horse in the division of the Looses of the horse, and yet I think no man will doubt, but the horsemen had Commanders. Lastly, I find in the Grecian historie, Captains of the light-armed often named. ^b Epithenes is said to be Commander of the Targetiers, in assist the Grecians had against the Persians. ^c Stratocles commanded the Cretan Archers in the returne of the Grecians out of Perlia. ^d Eurybates Captain of the Cretan Archers in Alexander's army was slain by the Thebans at the siege of Thebes. ^e When Antiochus the Captain of the Archers was dead, Ombio was chosen in his place. ^f Mention is made also in ^f Arrian of Clearchus the Captain of the Archers. And when Elian calleth the 4 Sytremmatarchs, and the 4 Epixenages super ordinary (Εἰσάκτους) he calleth the 4 as much of all the other Commanders. And he saith expressly of the officers of the Centurie, that they were super ordinary (Εἰσάκτοι).

4 A Pylagi] The word is a body of light-armed. Which word, if it were taken, as it naturally signifieth, is common to, and comprehendeth all the bodies of the light-armed, whereof Elian speaketh in this Chapter. But here it is restrained to a body of light-armed, which compriseth 256 men, and 32 files, and so it is to be taken.

A Xenagie] That is, a command of strangers. Elian before saith, that a Syntagma was by some called a Xenagie. I have given my opinion there of the original of the word, which I neede not to repeat here. This onely I will note, that of all the bodies of the light-armed, no one hath a common name with the body of the armed, but onely the Xenagie. And Elian giueth also that body of the armed another name, calling it a Syntagma. The Xenagie hath in it 512 men, and 64 files.

g Polyb. lib. 1.
47 B.

h Arrian. lib.
91. C.

A Sytremma] ^g It signifieth a conglabration, or trouping together. Proper names are wanting for these bodies, and therefore such taken, as might at any hand signifie the thing means. In continuance of time use hath giued a passage, and made them to be accepted as proper enough. The Sytremma consisteth 1024 men, and 128 files. There is nothing to be found in Elian of the Chiliarchie of the light-armed; Yet doth ^h Arrian mention 2 Chiliarchies of Archers in the Army of Alexander.

An Epixenagie] A command above a Xenagie; As after ward in the command of the horse, there is an Epipharchie above a Hipparchie. The word is improper and hard enough; but when it is received by use, what should we seeke for more? It consisteth 2048 men, and 256 files.

A Stiphos] It is deriued from steibo, to thicken, and in pecuniary of another name, this body of the light-armed is called Stiphos, because they are thickened, and thronged together. There is in it 4096 men, and 256 files.

after exp. 31.

An Epitagma] It is the last body amongst the light-armed. The signification of Epitasso is to place behinde. From thence cometh Epitaxis, placing the light-armed in the Reare, which word is after used by Elian. Epitagma is deriued from the (αμε) fontaine; and it is called Epitagma, not of placing behinde, (for sometimes they were placed before, sometimes in the flanke; but it was the best name they could giue to the whole light-armed. And yet it may be, that because all the light-armed in ancient time were placed behinde, the whole masse was called Epitagma, as being placed after the armed in the reere. The Epitagma hath in it 1892 men, and 1024 files, for so many light-armed attend the Phalange.

Eight super ordinary men] Why these eight men should be super ordinary more than the rest of the Commanders, I conceiue not yet. If Elians meaning be, that these alone shall command the light-armed, by force and practise of ancient times conuince the contrary.

contrary. Besides where he nameth foure Epixenages, it agreeth with the number that are in the Epitagma of lights. But where he addeth foure Sytremmatarchs more to make up the number of the eight Super ordinary, it is hard to knowe, which foure he meant, considering there are eight Sytremmas in the Epitagma.

Now because the files of the light-armed are in embarrasling to be marshalled to the files of the armed, I thought good to set downe how the bodies of both agree, by comparing them together in files, not in number of men. For in number of men they cannot well agree, because the file of the armed hath more, then the file of the light-armed. And the number of the armed in graffe is 16384. of the light-armed but 8192. And I will first begin with the Sytasis, because it is the least body of the light.

The bodies of the armed,

A Tetrarchie
A Taxis
A Syntagma
A Syntagma
A Pentecostarchie
A Chiliarchie
A Merarchie
A Phalangarchie
A Diphalangarchie
A Tetraphalangarchie

The bodies of the light-armed.

A Sytasis,	4	files.
A Pentecostarchie,	8	files.
A Hecatontarchie,	16	files.
A Pflagie,	32	files.
A Xenagie,	64	files.
A Sytremma,	128	files.
An Epixenagie	256	files.
A Stiphos	512	files.
An Epitagma	1024	files.

The use of light-armed foote.

CHAP. XVII.

Darters, Archers, and all other, that vie flying weapons, are good to begin the fight to prouoke the enemy, to breake and shatter armour, to wound, annoy, and beate downe a farr off; to disaray the enemy, to repulse their horse, to beat in their light-armed, to discouer suspected places, and to lay Ambushes. Lastly these first vndertaking the Skirmish, and continuing it with the rest, and seconding them, and seruing for speedie, and farr-off-attempts, worke many, and great effects in fight.

Notes.

The arming, place, sitting, bodies, and command of the light-armed are hitherto handled: Now followeth the use, and service they performe in the field. And first wee are to thinke of the basic of an armie, as of the body of a man, that is compast of severall parts: Of which some parts are of more use then other. Some being able to performe their function without the helpe of the other, some except the other helpe, can doe nothing to purpose of themselves. The parts of an armie are like. The armed are the strength of the field, and are the refuge for the rest in extremitie. The light armed with the armed, worke great effects (these which Elian speaketh of in this Chapter and many more) without them they cannot so much as maintaine a place in the field. ^a As Xenophon saith, a Xenoph. Cy. Let them be neuer so many in number, yet dare they not stand or abide a fewe armed. In which respect, a place fit hath alwaies bene sought for their service, to secure them from the access of the horse, or of the enemies armed. Which place was either be-
rope. lib. 7.
186. C.

hinde the Phalange (as Ælian here would haue it) or else in the wings betwixt the Horse, and the armed, or if they skirmished loofe before the front, and chanced to bee pressed with the enemy, they retired into the internals, and conueied themselves behind the Phalange in safety. * Leo saith, if there be any place of strength, it will much helpe the light-armed. For after their flying weapons spent, retiring thither, they will be in more securitie, as a steepe rockie place, or the banke of a riuer, or a high hill, or such other. Our histories report, that at the battaile of Agincourt in France 200 English Archers were beset in a meadow fenced with a deepe ditch, from whence they so guided the French horse and foot, that they were a great helpe to the victorie. The like happened before at Poitiers, where that brave Prince of Wales eldest sonne of Edward the third, hauing to fight with the whole power of France under the leading of their King, gaue safeguard to his Archers with hedges and ditches, and other strengths. So that the French horse hauing no access to disorder them, were ouerwhelmed with the tempests, and stormes of their arrowes, and such a victory obtained by our nation, as might match the most renowned of all antiquitie. To say nothing of the invention which Henrie the fifth used against the horse of France for securing his Archers. The storie saith, he devised stakes of two yards long, and armed both ends with pikes of iron, the one to stick into the ground, and the other to gall, and enter the horses bellies, in case they came to charge our Archers home. By means whereof he carried the famous victorie of Agincourt. This for the assurance of the light-armed, when they come to fight, without which assurance, their seruice would be weak, and scarce worth the hauing. Their seruice then according to Ælian hath many particulars. And they are good to

Prouoke the enemy. If the enemy be in a wood, a fence, a hill, a fort, a towne, or other place of strength, that admitteth no access, the manner hath bene to send out the light armie to shew themselves, and with a brado to towle him out of his advantage, and bring him into the field, where he may more easily be dealt withall. Examples are plentifull, but I will content my selfe with a Macedonian example. * Alexander leading his armie against the Tribals, that had hid themselves in a wood, commanded his Archers, and Slingers to runne out, and to shoote, and sling amongst the Barbarians to see, if he could towle them into the plaine. The Archers, and Slingers spared not to let sie, and the Tribals being wounded with arrowes, threw themselves out of the wood with all speed, to fall vpon the vnarmed Archers. Alexander presently commanded Philotas with the Horse of vpper Macedonia to charge the right wings, on which part they call out themselves thickest. And Hieracles, and Sopolis with the horse of Bottia, and Amphipolis the left, himselfe stretching out in length the Phalange of foote, and setting the rest of horse before the Phalange, led against the midle of the enemy. As long as it was but a skirmish, the Tribals had not the worde. But after the Phalange close ferred came vp roundly to them, and the Horsemen charged them no longer with darts, but pressed, and ouerborne them with their horse, they fled thorough the wood to the riuer.

To beginne the fight. * Leo agreeeth. If, saith he, we haue light-armed enough, let them, before the armie ioyne, send their darts, and arrowes at the enemy, and after the fight of the armed is begonne, pike the flanke with their misse weapons, that at once both their flanks may be assaulted. It hath bene and is now the ordinarie course to beginne the fight with the light-armed. And because we shall read of no battaile almost wherein it was not so, I will forbear examples.

To wound at farre off. The light seruice is great purpose, if the Generall desire not to come neere to fight, but seeke to annoy his enemy a farr off without danger of his owne folkes. * Liuy telleth of Cn. Manlius Volsio, that being to make warre against the Græcians,

Græcians, that fled into the mountaine, and awaited the Romans there, and sought to defend themselves, by advantage of the place, he prepared great plenty of darts, arrowes, bullets, and small stones for Slinges: and leaving his legionari souldiers behind, led he light-armed, against the enemy, that possessed certaine straits his, by which his armie must passe. After some fight the Gallo-Græcians being not sufficiently armed, to defend their bodies from the misse weapons, the light-armed of the Romans forced the passage. And following them euen to the Campe, where their Companions came to their aide, they first drue them into their Campe, and after the Legionarie Souldiers coming vp, they wounded them. Thence before rehearsed the historie of Iphicrates, who with his Targetiers (that came seldom to hand blowes, but plied the enemy with darts a farr off) overthrew and slew a whole Mota of the Lacedemonians. The Acarnians, likewise with this kinde of fight, much incumbered Ageilaus, that made an excursion into their Country. The story is this, * Ageilaus hauing taken a great prey, in the territory of the Acarnians, rested that day, where he had taken it, being busie in selling of it. In the meane time many Acarnian Targetiers assembled themselves together, where Ageilaus was incamped vpon the side of a mountaine and with darting and slinging, they forced his Campe to descend to the plaine, themselves in the meane time being free from hurt. The next day Ageilaus led away his armie. The passage out of the place was straight, by reason of the mountaine lying about in a circle, which the Acarnians possessing, plied the Lacedemonians with darts, and stones, from the higher ground, and sometimes descending to the skirts of the hills, they pressed the armie so, that it could not move forward. And when the armed, foote, or horse, fell out vpon them, they profited little: For the Acarnians retired immediately, to their strength. Ageilaus perceiving it would be hard for his armie to winde out of those straights, so long as the enemy so hung vpon them, resolved to charge those on his left hand. For the ascent on that side was more easie, both for his horse, and armed foote. Commanding therefore, his men to charge, the armed (of 29 yeeres of age) first fell on, and the horse after them vpon the spurte. Himselfe followed with the rest. The Acarnians therefore, that were defended, and busie a darting, were quickly put to flight, and many flaine in seeking to remount the hills. But their armed foote, and most of their Targetiers, stood imbattrailed on the toppes, and from thence both threw other misse weapons, and lanced lauelines, wherewith they wounded horsemen, and killed some horse. But being ready to be charged by the Lacedemonian armed, they fled, loosing some 300 in the flight. These light-armed then, as long as they can keepe aloofe from the enemy, annoy them sore by wounding (as Ælian saith) a farr off, as [once as the armed come vp, they are glad to quite their place, and save themselves by flight.

4 To disarray. So long as a battaile remaineth in order, no victorie is gotten against it. Breaking of array, and disbanding, are companions of flight, and of forsaking the field. The armed, that are to endure the efforts of the light-armed, must either keepe still their order, and suffer themselves, to be knocked downe, and flaine, as they stand, or else provide for themselves, by flight, or by yielding. For the light-armed effect with their misse weapons the one, or the other. An example may be seene in the Egyptians in Crælius his battaile, who after the defeat of the rest of the armie, maintained yet the fight, and yielded not to Cyrus, though he had now the victorie. Cyrus at the first charged their buckles with his horse, and being not able to breake them, was faine to command his Archers and darters, to shoote and cast their darts at them: wherby the Egyptians after many wounds, and losse of their people, were finally constrained to yield. A like example is before alleaged of Domitius the Lieutenant of L. Scipio, who with misse weapons alone forced the Macedonian Phalange to scatter, and take themselves to flight.

* Xenoph. hist.
Græc. lib. 4.
§ 13. D.

* Xenoph. Cy-
ro. lib. 7. 178.

* Appian. in
Syriac. 109. B.

b Plutarch in
Crasso.

c Plut in Ant.

d Liu decad. 4.
lib. 1. 16. A. B.
e Hirtius de
bell. African.

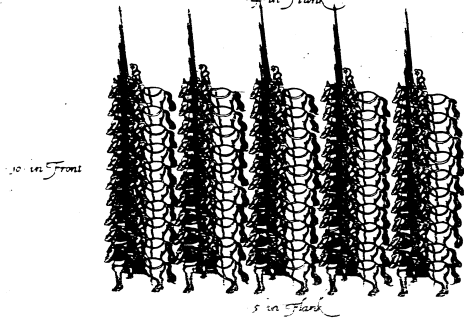
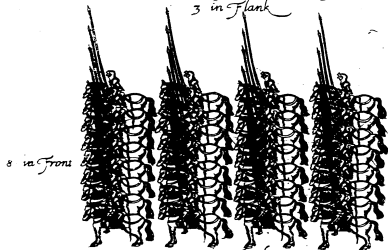
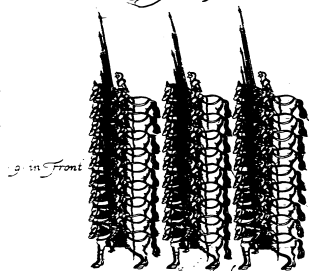
5 To repulse their Horse] The light armed alone, without a fur: retreat to the armed, or else some place of strength, can doe little in repulsing of horse. I have shewed before in the ^e exploits of Crassus into Persia, how the lightarmed were beaten in by the Perlian horse, and by the shew of wounds, they received, and with their feare, discouraged the armed. The like happened in ^e Antonies retreat out of Persia, the lightarmed being faine to shroude themselves from the Perlian horse within the Phalange of the armed. Be they neuer so many, without some such assurance the horse will soon overcome them; having this assurance their service much assisteth horsemen both in wounding them, and in killing their horse. I therefore ^e of ancient time it was vsuall to mingle horse, and light armed together. For the enemies horse so charged, cannot be able to resist both. A notable example is in ^e Hirtius: Cæsar, saith hee, hauing a journey in hand, and but a small number of Horse, and legionary Souldiers, was in his way serued by the enemye abounding in store of Horse, and of light armed Numidians amongst them. And when the Souldiers of Cæsar fell out to charge, the enemies horse galloped away, and the foote stood fast, till the Horse with a full career returned to the rescue. This kinde of fight troubled Cæsar much, and would haue troubled him more, had hee not recovered hills that were not farre off, and by that means shaken of the molesting enemy. And for repulsing horse there is no better means for the armed foote, then with the light armed to line that part of the battaile, where the horse shall be about to giue on.

f Xenophon. Cy-
rop. lib. 3. 29. E.
g Liu decad 4.
lib. 1. 16. B.

6 To beat in the light armed] The light armed being nimble and quick, and seeking alwaies advantages by changing of ground, can neuer be forced by the armed foote, who are charged with heauie furniture, and by reason thereof can make no speed to seek succour in the battaile of their armed. Either they must be beaten in by the horse, or by the contrary light armed, as Elian hath heere. The Horse are commonly to encounter with Horse, and the light-armed with light-armed, amongst whom the greater number preuaileth, their skill, and armes being alike. For the fight being a farr off, many will sooner wound, or kill a few, then a few many, saith ^f Xenophon: If the fight be at hand the better armed, or better mindea will drue the other out of the field. The ^g Roman Horse, and the light-armed, were too hard for the Macedonians, and chased them to their Campe. And that happened by reason their armour was fitter to close, and to fight at hand. So our Archers at the battaile of Cressly compelled the Genua crossbowes to forsake the field, the english bow being better in vse, then the Genua crossbowe. When they haue made the contrary light armed to quit their place, they are at liberty themselves to serue, where most aduantage may be had of their service.

7 To discouer suspected places, and lay ambushes.] Suspected places are such for the most part, as ambushes are laid in. Ambushes are of two kinds, being laid either to endamage the enemies battell in the field, or to hinder, and disaioint his march. The places, such as are removed from sight, and had neede of speciall discouery. As woods, mountaines, Forrests, rocks, bankes of riuers, caues, hills, hollow, and deepe wates, and the like. The most part of which are rough, and intricate, and scarce passable for the heauy armed, and horse. But the light armed, that are not incumbered with weight of armes, & able quickly to aduance, or retire, are fittest to lie close in such places, or to search if the enemye be lodged there. For the first kinde of Ambushes wee read, that both heauy armed, and horse haue bene impleiad. The warre of Anniball in Italy afford plenty of examples here in. For the other, which is to be set or discouer wates, there are none so fit, as the light armed, whose quicknes, and expedition, giueth them aduantage to assault their enemy with their miserie weapons, though the ground be neuer so unequal, and meanes to view any place suspected without almost any danger of their owne.

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The Square



Cap. 33.

A Rhombe of Horse

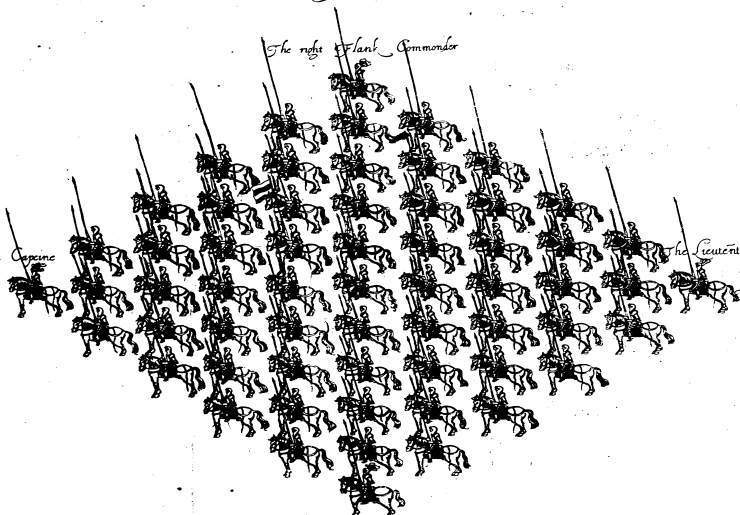
The right Flank Commander

The Captaine

The Lieutenant

The Rear

The left Flank Commander



8 For speedy and farre attempts] *A beaue armed man is not fit for furre or sadaine attempts; he is armed for a firme and stedfast fight, and not for conuulsions.* Alexander, *whoeuere he was to vnto expedition,ooke with him the horse and light-armed, leaving the armed to come after.* * So did he, when he oppressed Clytus, and Glaucus in their campe; *so when he possessed himselfe of the straights of Cilicia; so in preventing of the burning of Tarsus; so in seeking to take the straights of the Vxians; and the gates of Peria; and the rocke of Aorne.* The same hath bene the manner of other Generalls, *as I haue noted in other places.* For when Celerity is requisite, who *so fit to be employed, as they who haue nothing to hinder their speede? The Targetiere had but a light target, and a spear; the lightarmed but their arms.* And what are they bowes, and arrows, darts, and stings, which haue no weight in them. * Which was the reason also, that in victory they were employed in giving chase to the enemy, that had lost the field. The armed used to follow in good order of battell, the slaughter, and execution was deliuered to the light armed, and horse. Wherein notwithstanding the counsell of Iphicrates was held good; take heede (said hee, to his light-armed) of ambushes, and spare not to presse hard vpon the reare of those, that flee, till you come to riuers, or straights, or ditches. For it is dangerous in such places to hinder the enemies flights, least feare turne into desperation.

The fashion of Horse-battailes: and first of the Rhombe, the Wedge, and the Square.

CHAP. XVIII.

Those, that haue written before mee, haue diuersely framed Horse-battailes, some of iust squares, some longer in flanke, then in fronte, some like a Rhombe, some like a Wedge, but none of them haue (as I may speake freely) expressed fully their owne conceits. Therefore to make all things cleere, and better to be vnderstood, I will set downe the severall figures of each severall kinde.

It cometh the Thebans whose power was great in Horse, were the first, that vsed the kinde of battaile fashioned in forme of a Rhombe (the inuention whereof is attributed to Iason) as fittest for all encounters; The Horsemen thus ordered being ready to turne their faces euery way with speede, and not easie to be surprised in flanke, or in the Reare. Because the best men stand in the flanke, and the Commanders in the Angles, as namely the Captaine of the troupe in the front, and in the right, and left Angles those, that are called Flanke-commanders, and the Lieutenant in the Reare-angle.

The Scythians, and Thracians haue vsed Wedges, and likewise the Macedonians by the ordinance of King Philip. For this kinde of battaile was held of more ex-act vic, then the square, because the Commanders are placed in a circle; and consisting of a narrow front, it maketh readie passage thorough any distance, and an easie wheeling and returning to the first posture, as hauing no such troublesome windings about, as hath the Square.

The Perians, and Sicilians, and most Grecians made choice of Squares, being of opinion they were more easie to frame, and fitter for ioint-mouing of the Horse, and more effectually in vic. For they are sooner in order being digested

The Tacticks

thus also, principally by their valor, put the Romans to flight. * Agellianus returning out of Asia towards his Country led his army through Thessalie, and being much incumbered in his march, by the Thessalian horsemen, that were his enemies, hee charged them and overthrew them, and pleased himselfe marvellously therein, because with troups of horse, which himselfe had raised, and disciplined, hee had overthrowne the Thessalians, that were (saith Xenophon) to highly renowned for horsemanthip.

2 Fashioned and forme of a Rhombe] There are three kinde of horse battalies mentioned by Elian, the Rhombe, the Wedge, and the Square. And the Square is either a full square, or longer in flanke then in front, or in front then in flanke. The Rhombe was the invention of the Thessalians, and in that forme they usually fought. But where he maketh lason to be the inventor of it, he afterward expoundeth his own meaning, attributing the invention to Ileon the Thessalian (from whom also it was termed ille) but the chiefest practise to lason. Euclydes defineth a Rhombe in this sort :

b Euclydes lib.
1. definit. 31.

* A Rhombe is a square figure, that hath the sides equal, but the angles not right. That is, the four sides of the square are of one, and the same length, but the points, which make the angles, are two of them stretched out in greater length, and become more sharpe, two of them brought narrower together, and made more blunt, then the right angles of a Tetragonall square. See the figure. It is the same figure in a battaile, that at this day we call the Diamond battaile, which is sometimes practised amongst the foote for show, and exercise sake, but amongst the horse I have not seene it practised. And as the square goeth to charge with all the souldiers, that stand in one of the sides, that is with the front, (for the front is but a side of the square) so the Rhombe chargeth with one of the points, which is the front of the Rhombe. Whether of them is of most use in the field, I am not to determine. For the square standes the practise of our daies, besides the usage of the Persians, Sicilians, and most Graecians, as Elian saith. For the Rhombe the Thessalians alone (which notwithstanding were acknowledged the best horsemen of Greece) unless we allow the Wedge for a parcell of the Rhombe. (A Rhombe being but a double Wedge, as making two wedges, when it is divided in two) and then have wee for the Rhombe not only the Scythians, and Thracians (both nations very good Horsemen) but King Philip Amintas sonne, and Alexander the great, and his successors. Either of both forms have their reasons. For the squares they, that use them, hold opinion (as Elian saith) that they were easier to frame, and fitter for joine mowing of horse, and sooner in order of file, and ranke, and that the Commanders jointly charged the enemy, which in no other forme could be done. For the easinesse to frame I see no great difference, onely custome, and use must in every forme, yea in the squares themselves make the horseman ready to know, and take, and keepe his place. The same may be said for the joine mowing of the horse. Now to file and ranke is common to the square with some Rhombes, and as soone done in the one, as in the other, the number of the troupe being once knowne, and every horseman having his place assigned, and the former resolved upon, into the which it must be cast. For where there are 4 kinds of Rhombes, one, that fileth, and ranketh an other, that fileth, but ranketh not; the third, that ranketh, but fileth not; the last that neither fileth, nor ranketh (as Elian teacheth in the next Chapter) The first will finde no more difficultie, of filing, and ranking, then the square, the two next albeit the one ranke no, the other file not, yet the want of filing, or ranking hindereth no more the readinesse of framing them, then the use of filing, and ranking helpeth the other. The fourth is rather curious then profitable, as I take, neither doe I finde example of it. And it may be truly affirmed of it, that the square is much easier to be followed. We shall have occasion to speake of the last three in due place. Touching the joine falling on of the Commanders, I confess the advantage is great. For when the best man (such as the Commanders ought

to

of Elian.

to be) altogether fall upon the enemy, they are very like to put hard to them. And as it is a great part of skill to bring many hands to fight, so is it no lesse, to bring the best hands to fight. Many hands make light worke, the best hands sure worke. Now for the Rhombe Elian allegeth these reasons. First, that it is fittest for all encounters, because the horsemen are ready to turne their faces every way with speed. Then, that they cannot be surprisid in flanke, or reare, having the best men in their flanks, and the Commanders in every point of the Rhombe. And cannot the square turne faces every way? They can, but not with the same advantage. For the Rhombe, which way soever faces are turned, remaineth in the first forme. And whether it be to the right, or left flanke, or to the reare, it keepeth still a even side, and the men of most service in the sides. Besides that one point alwaies affronteth the enemy. Not unlike a Calthrop, which howsoever you cast it to the ground, hath one point bearing right up to wound the horses feet: But the square in turning faces to either flanke, altereth the forme of the front. In a broad square, the front at the first was longer than the sides, faces being turned to either flanke the sides become longer, than the front; contrariwise in the Herle battaile. Besides in such turning of faces the square leeseeth the advantage of embattailing, the Commanders, that stood in the front, standing now in one of the flanks, and being not able to charge the enemy jointly, (the greatest advantage of that forme) and so the front being without Commanders, is (subject and in danger of surpris, where the Rhombe, which way soever faces turne, hath as many Commanders in the front, as at first. But let vs take the horse square in full strength with all Commanders in front; whether shall that forme be better, than the Rhombe? I dare not affirme it. For where there are two kinde of fight; One with maine force, the other with sleight, and Art; in the first I will preferre the square, in the last the Rhombe. The square for slaughter and violent overthrowing, the Rhombe for piercing, and artificial breaking the enemies battaile, which last amongst great Commanders hath alwaies bene accounted the best kinde of winning. In the square all the Commanders fall jointly upon the enemy, and because they are supposed to be the chiefe of the Army, in all likelyhood they will overthrow the formost, and slay many. Yet by reason of the length of their front, they sicke men to man, and can make no farre entrance, and the victorie hangeth doubtful, till they have slaine the most of them, that resist, and so make the rest to flie. The Rhombe contrary wise, being narrow and pointed in the front, first forceth a passage with the point, which maketh way to the rest that follow, and then without great labour piercing further, and further, breaketh the adverser battaile, & disperseth, and putteth them to flight, and after doth execution at pleasure. Neither can I make a fitter resemblance, then by comparing the 2 figures, one to an axe, the other to a wedge, both instruments used for dividing solid masses of wood. For the axe, albeit sharper, then the wedge, yet having the edge drawn out in length, can not by any strength be driven sure into the wood, but by doubling many strokes, and by much labour cometh at last to divide it. The wedge contrary wise, though not so sharpe, being once entered, insinuateth it selfe more by litle, and litle with the narrowness of the point, and maintaineth the hold it first got, at last forceth it asunder, though it be neuer so tough. So is it in the square, and Rhombe: whereof the square beginneth, and endeth with violence, the other with first cunning, and mildenes; as it were, to enter: being once entered remeth a peeces, and disperseth all that standeth in the way. The manner of our times alloweth not of Rhombes; Experience of former times highly prized them. I will insist upon the Thessalians alone, who are accounted the inventors of the Rhombe, & sought alwaies Rhombe wise. Polybius had seene their service, and bene General of the Horse in his owne country, and therefore able to judge. He giveth this censure of them; * that in troups, and being imbatallied,

* Polyb. lib. 4.
c. 28. B. C.

led, they could not be resisted: to fight man to man in single combat, they had neither will, nor courage. What then should be the reason they should be so powerful in troops? No other, than the forme of their unbattailing, which forme was the Rhombe here mentioned by Ælian. In this forme they commonly beat the Græcians, and Persian squares, and eat the reputations of the best horsemen of Europe.

3 The Scythians and Thracians vied the wedge] The Rhombe is of 4 sides, the wedge but of three: and halfe a Rhombe maketh a wedge, as will be shewed in the next chapter. The wedge was used by the Scythians, and Thracians, and whether King Philip of Macedonia borrowed it of them, I am uncertaine. But I rather incline to thinke, that his Theban Master taught him as well the wedge, as other formes of battalles. The cause of my conjecture is, for that I finde that his fellow scholar Epaminondas beat the Lacedæmonian horse at Mantinea in that forme. Xenophon recounteth the storie to this effect: The enemy (they were the Lacedæmonians) ordered their horse like a Phalange of armed in depth, without mingling foote with them: But Epaminondas made a strong wedge of horse also (for before he tells the Theban armed were cast into a wedge) and ioyned some foote with them, concealing after he had cut in peeces the horse, he should not misse of ouercomming the other forces of the enemy. And so going to charge he was not deceived of his hope. Thus Xenophon. Of ioyning horse and light armed together, I have spoken before: And that they were light armed, that Epaminondas ioyned to his horse, Diodorus Siculus sheweth. By Xenophon then it is plaine, that not only the Scythians, and Thracians, but the Græcians also, when they thought it convenient, used the horse-wedge, and that Epaminondas ordered both foote, and horse in a wedge. And considering King Philip was brought up in Epaminondas his Fathers house, and made partaker of the learning wherewith Epaminondas was instructed; it is like in erecting a new military discipline amongst the Macedonians, as he tooke many other things from the Græcians, so he borrowed this forme, having first seen the notable effect thereof at Mantinea.

Now Ælian bringeth reasons, why the wedge was holden better than the square. Let me with leave add a word or two why I take it to be better than the Rhombe. And first it cannot be denied, that the wedge having the same manner of disposition that the Rhombe hath, that is a front ending in a point, where the Captaine standeth; two points of the two flanks, where the flanke-commander stand, the Lieutenant in the reare, and the best men in the flanks, but it must be as powerfull to open the enemies battale, as the Rhombe is. Then it hath this advantage of the Rhombe: that it bringeth more hands to fight. For let the Rhombe and wedge be framed of an equal number, the wedge in figure resembling the forepart of the Rhombe must have the horse, that should be ranged in the reare of the Rhombe, orderly couch'd within the 3 sides thereof: where by both the number of the horse in the sides is increased, and the bulke of the body betwixt flanke and flanke enlarged. And seeing both the Rhombe and the wedge goe to the charge with the point of their front, the wedge both hath the property to pierce, and enter the enemies battale by art and sleight, as well as the Rhombe, and doeth it with more strength, because of the great number of hands in the sides, which still come to fight. Ioyne, that the hinder part of the Rhombe serveth only to avoid surprizes, and worketh nothing in charging. For after the two flanke points are entered, the rest of the Rhombe growing narrower, and narrower toward the Reare, fall to further off from the enemy, and is content only to follow the way, that was made to hand by the front and flanks; without being able to strike a stroke, especially if it preferre the order it ought to keepe: whereas all parts of the wedge are effectually the point to enter the sides even to the flanke corners, where

b Diodor. Sic.
lib. 16. c. 17.
c Xenoph. hist.
Græc. lib. 7.
c. 46. B.

d Diod. Sicul.
lib. 15. p. 202.

where the Reare endeth, to dispart and dissuere, and finally to disorder the enemy, whereby the victorie ensueth. And if we may rely upon authority, the authority of King Philip will say much for the wedge. For unlesse he had held it better than the Rhombe, hee would not have chosen, nor accustomed his Macedonians to it, nor Alexander after retained it, if he had not bene of the same opinion. Neither did the event accuse them: for almost in all battalles their horse thus dispos'd carried away the victorie. But, as I before noted, neither Rhombe, nor wedge have found grace in the eyes of the great Generalls of our dates, nor can we tell what to insist upon, till experience hath taught, how well these formes will agree with the weapons, and service of our moderne wars.

4 The Persians made choice of squares] The square is the third, and last forme of horse-battale that Ælian mentioneth; whereof there are three kinds; one with a larger front, then flanke; an other with a larger flanke then front; the third, with front, and flanke equal. All these three were used among the Persians, and Græcians. For two of the first, Xenophon may witness. When Ageilaus, after Tissaphernes (the King of Persia's Lieutenant in part of the lesser Asia) had broken truce with him, made an incursion into Phrigia, h Xenophon telleth, that the rest of his journey was without impediment, till he came not farre from Dasyleium. There when his horsemen galloped to a hill to discouer the country, by chance the horsemen of Pharnabazus (an other of the King of Persians Lieutenants) being about the same number as the Græcians were, and sent by Pharnabazus under the command of Rathynes, and Bancamus his bastard brother, galloped up the same hill, and discovering still the other no further off, than two parts of a furlong, at the first they stood still; the Græcians ordered Phalange-wise 4 in depth, the Barbarians making their front 12 in length, the depth many more. Afterward the Barbarians began first to charge. when they came to hands, all the Græcians that ioyned, broke their staves. The Persians having Cornel darts killed some 12 horsemen, and 2 horses. Hereupon the Græcians fled. But when Ageilaus came with the Armie to the rescue, the Barbarians againe forooke the field. The Persians then used a square longer in flanke, then front: The Græcians a square longer in front, then flanke. But which of the three squares is most to be esteemed Ælian sheweth in the words following, saying those squares are best, that

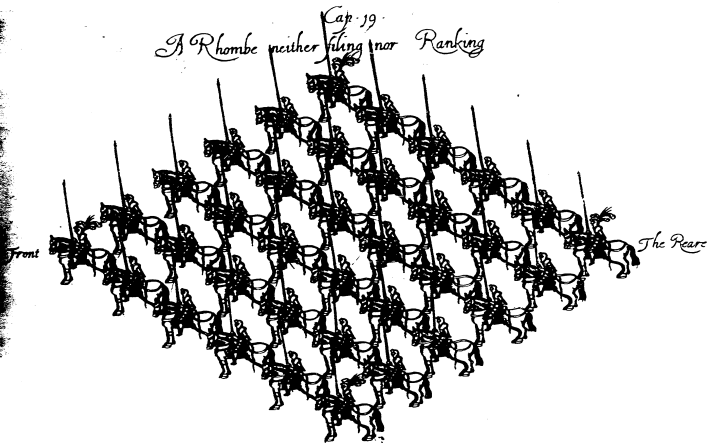
5 Double the number of the length, to the number of the depth] What the length, and depth in a battale are, we have scene before. Yet to understand Ælian the better, let us repeat, that the length of a battale is the extension of the front; the depth the extension of the flanke. To double then the number of the length to the number of the depth, is to place twice so many men in front, as in flanke. As for the purpose, 6 in front, 3 in flanke; or 8 in front, 4 in flanke; or 10 in front, 5 in flanke. And that this was the manner of the Lacedæmonians appeareth by the Oulamos, or horse-troope, instituted by Lycurgus, which was figured Tetragonally with a equal sides, and contained in it 50 horse. Now that it could not be a square of number, that is, to have as many horse in flanke, as in front may hereby be shewed, because no square number will make 50. The nearest is 7 times 7, which amounts to 49. But proportioning the number of the length double to the number of the depth, that is 10 in front, and 5 in flanke, even 50 will avile. So that the horse troope of the Lacedæmonians had the number of the length double to the number of the depth, and made a square in the equality of measure of the sides, not in number, which is the Tetragonall figure, whereof Plutarch speaketh. And where Xenophon (as I have alluded before) reporteth that the horsemen of Ageilaus were but 4 in depth, it hindereth not this truth. For, as I noted before, the ordinary array of the Lacedæmonians foote was 8 in depth. Yet did Pausanias the Lacedæmonian

King

Plutarchin
Lycurgo.

h Xenoph. Hist.
Græc. lib. 2.
c. 49. D.

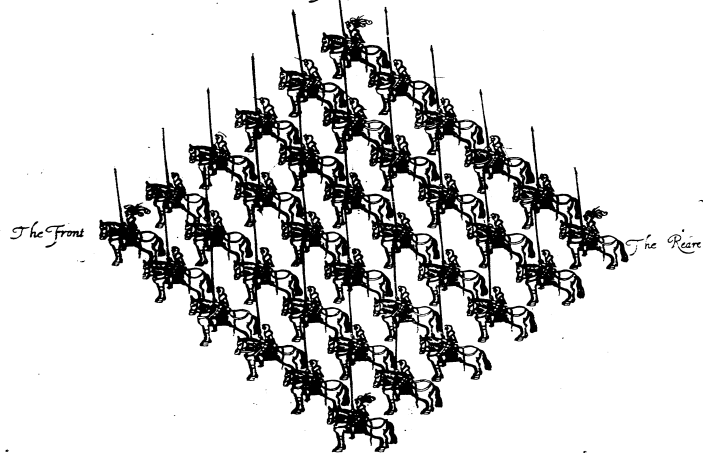
Cap. 19
A Rhombe neither filing nor Ranking



but few, let it be no more than 5. in which case the number of the front is to double the number of the front, to the number of the flank 3, and to the number of the troupe 12 (for horse troupes are no. 12) to enlarge the length of the

the number of the front, to the number of the flank 3, and to the number of the troupe 12

Cap. 19
A Rhombe filing but not ranking



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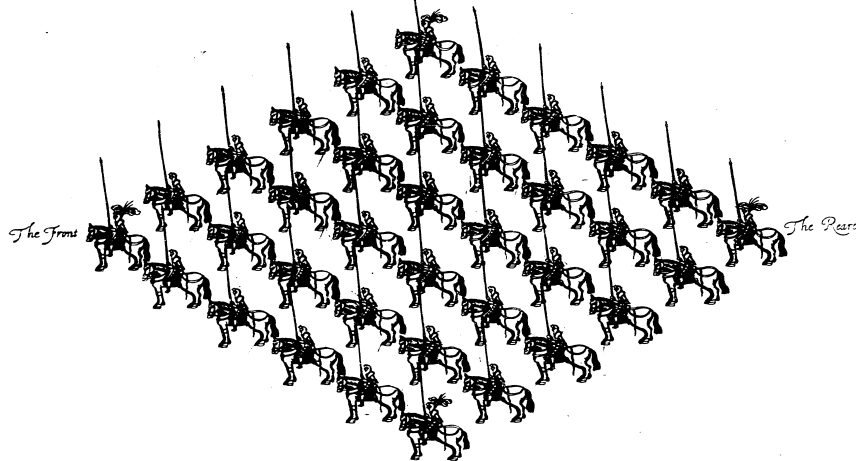
... and the 10th of the ... take proportionably one to an other.

flanke. And first they place the *Leader*; then one at his right, and an other at his left hand, so distant, that their Horses heads reach vp to his Horses shoulders, as

is

Cap. 19.

A Rhomb Ranking but not Filing



etc. of ev.

the

of Aelian.

the front, and the depth of the flanke proportionably one to an other.

6 When there are as many horse in length as in depth] I noted before in the ninth Chapter, that there were two squares of equall sides, the one of number, the other of figure; which two squares differ in this, that the one maketh vnequall files in the shape of the battaile, the other equall. The first at this day, we call a square of men, the other a square of ground. When the number of the sides is equall in length, and depth, it giveth but halfe so much ground in front, as in flanke. Each souldier, if it be a foote, battaile, occupying a foote, and a halfe of ground in front, when he goeth to charge, where in flanke he must haue 3 foote. And in a horse troupe 3 foote in front, and double, or (as some say) treble as much in flanke. And so are the sides vnequall. The even length of flanke and front giveth a like ground to both, and maketh the sides of the figure equall, but the number of the front double to the number of the flanke, whether it be in horse or foote. In foote, because the souldiers in Ranke haue but halfe so much distance, as they haue in file; In ranke a foote and a halfe, in file three foote. In horse, because the length of the horse is much more, than his breadth, and that length is fully stretched out in flanke, the breadth onely in front.

Why Rhombes were first brought into vse, and the diuers formes of them.

CHAP. XIX.

THE forme of the Rhombe seemeth to haue beene taken vp for the necessarie vse thereof. For the Capitaine possessing the first place, the next following Horsemen are not to ranke with him, but to come a litle after on both sides; so that the heads of their Horses may reach to his horse shoulders, & on the right, & left hand, and behind, they ought to keepe good distances that too much thronging and clustering together, breed not disorder, whilst some horses being by nature fullen fall a flinging oftentimes, and foule with other; and considering the beast is somewhat long of body, that in turning about he wound not the horsemen, that are in fight, whilst with his heeles he ayemeth at the Horses next vnto him.

They that fashion Horse into Rhombes, so fashion them, that some Rhombes file, and ranke; some neither file, nor ranke; other some file, but ranke not; other ranke, but file not: every particular whereof standeth thus.

They that would haue a Rhombe both file and ranke make the greatest ranke being the middlemost of an vneuen number, as of 11, or 13, or 15. To which they ioine other ranke before, and behind, every one conteyning two lesse than the former; as if the greatest ranke consist of 15, the next ranke on either side are to haue but 13, the next on either side of these 11. and so every one two lesse, till at last you come to 1. And the whole Troupe is to consist of 113 horse.

The halfe Rhombe is called a wedge being fashioned three square; so that the forme thereof appeareth in the Rhombe.

Other haue formed the Rhombe so, that the Horsemen embattailed in that forme, neither file, nor ranke, conceiuing that turnings and other motions will be more easily performed in this figure, nothing hindering before, behind, or in flanke. And first they place the Leader; then one at his right, and an other at his left hand, so distant, that their Horses heads reach vp to his Horses shoulders, as

is said before. And the first row they make of an uneven number (as 11). The *Leader of the Troope* landing in the middell, and 5 other being laid to him backwardly on either side; so that this *Rank* containeth two sides of the *Rhombus*. Then the *rearre Commander* is placed directly behind the *Leader*, and to him are other ioyned forwardly on either side, and the number of every following ranke after the first, is to be two lesse than the former, and therefore 4 must be added on either side to the *rearre Commander*, and the number of the second ranke be 9. This ranke maketh two sides *Parallel* to the two former sides of the *Rhombus*. The third must be 7, and so forward to one. The whole *Troope* hath in it 36 Horle. *¶ Polybus* expresth the forme by the Greeke letter Δ . and maketh it to consist of 64 men.

Other *Rhombes* there are which ⁶ *file*, but *rank* not, and are fashioned thus : They make a file of any number, the Captain of the *Troope* being *File-leader*, and the *Rear-Commander* the last of the file. To both the *flanks* of this file, they lay two other files, either of them one less in number, than the first. These they begin to place, even with the middle of the distances of the first file on both sides, as if there were 10 in the first file, the next files on either side should have 9 a pece, and the next after them 8 a pece, and still one less in all the rest after-coming files, and so it will fall out, that the Horsemen shall file, but not *rank*. This forme is profitable for turning of faces, when need is, from one point of the *Rhomb* to another. 7 Turning to the right hand is called turning to the *staffe*. Turning to the left hand is called turning to the *Raines*. But if a *Troope* be ⁸ to *rank*, and not to *file*, it must be ordered thus : The middle and greatest *rank* is to be made of an vneuen number, and the rest of the *rankes* on both sides, laid even with the distances of this *rank*, as was done in the *filing troope*. So shall you haue a *Troope* that *ranketh*, but *fileth* not.

Notes.

THE former Chapter had a generall division of Horse battailes into Rhombes, wedges, and squares; this comprehendeth the sundry figures of Rhombes, and the manner of framing them. Rhombes therefore are of 4 kinds, *some filing, and ranking; some filing, not ranking; some ranking, not filing; some neither filing, nor ranking.*

1. The heads of the horses reach to the heads of his [shoulders] *Alian saith, that in a Rhombe the Capitane standeth first, and the heads of the next horse reach to his horse's shoulders. This rule, if it be taken generally, and meant of all Rhombes, will deceive us; if for two kinde of Rhombs alone, there is nothing more true. The Rhombe neither filing, nor ranking; and the Rhombe filing, nor ranking, have the followers horses heads advanced to the shoulders of them, that stand before. But the Rhombe filing and ranking, and the other ranking not filing, come woly behind the horse of the Capitane, as the figure shewes, and will appeare in the verbal description of the Rhombe.*

2. A Rhombe both to file and ranke] To make a Rhombe both file and ranke, choicemust first be had of an even number for the ranke the midst of the Troupe, where the manner is to begin the Rhombe 3, which number must neither be too great, lest the Troupe grow also too great, nor too little, lest there be in it no strength. Alian gives a 11, 13, or 15 for that ranke, and wilth vs to begin the frame by placing first the middle ranke, to which the other ranke are to be joined on both sides, the middle men againe.

against the middle man of the first rank in a right line: of file, and the rest is like fort, every Rank still decreasing 2 men, till at last in the front, and rear-angle you come to one. The figure of this kind of Rhombus I have placed in the precedent Chapter; where in the middle rank is of 11, and the whole troupe of 61, and the horse heads of those that follow reach not to the former horses shoulders.

3 The halfe Rhombe is called a wedge] *I have spoken of wedges before, but naming of the framing of them. Eilian here sheweth how they are framed, when he saith, that the forme of them appeareth in the Rhombe, and that the halfe Rhombe is a wedge. For as in a Rhombe filing, and ranking, you begin with placing the middle ranke first, and so proceed adding on both sides ranke to ranke, till you come to one man in the front: So must you proceede in a wedge, (saying that to the first, and greatest ranke, you toyne the rest only on the one side, abating still in every ranke 2 men, till you come to the point of the front, where the Captaine standeth alone. And this was the ordinarie horse troope amongst the Macedonians; and is described in the next Chapter.*

4. That the horsemen neither file nor rank] The second kind of Rhombe specified here by Elian is directly opposite to the first. The first both filed, and ranked, its neither fileth, nor ranketh; and is that kind, which I noted in the last Chapter, to have more curioſitie, than eſe. For the reſt, what is more eaſie to ſtand, than they? In which either files, or ranks are laid together; or files alone, or ranks alone. And out of that iſſuing both in the inward parts of the Rhombe, and the outward (that is the flanks) ariſe, and are without difficulty figured. In this you muſt firſt begin with the outſides, and make two front lines, or ſides of the Rhombe; and after adde as many to the Rear. And then when the 4 ſides are framed, and haue their place, patch up by peece-meale theſt of the body within. Wherein if there be not very large diſtances left betwixt horſe, and horſe, eſpecially euerie one being laid head to ſhoulder to an other, it is not poſſible to convey ſo many horſes within the ſoure ſides, as will make up the full Rhombe. And yet make it rſe as you will, the trouble is more, than in the reſt of the Rhombes. And for the eſe, I ſee not how it can be greater, than in the reſt, wher ſo euer is alledged for turnings, and other motions. And the more I thinke upon it, the more I am inducd to thinke, that it was the invention of ſome Tacitſe maſter (of whom I have great plenty amongſt the Grecians) who ſeemg that ſome Rhombes filed, and ranked; and other ranked, but filed; no; other both ranked, and filed, and that the two firſt were oppoſite the one againſt the other, would needs bring in a fourth, neither filing, nor ranking, to make an oppoſition likewiſe againſt the third. But becauſe this kinde alſo is ſpecified by Elian, let vs ſee how it is to be framed. Elian for examples ſaie would haue the Troope to conſiſt of 36 horſe. To put theſe 36 horſe in a forme, that ſhall neither file nor rank, we are thus to worke. Firſt we muſt begin with the two front ſides of the Rhombe, and make them of 11 horſe, placing them thus: The Leader and Capitaine in the point; next him backwardly on each ſide a horſeman, his horſe head reaching to the ſhoulders of the Capitaine's horſe; then on the outward ſide of each of theſe a horſeman, and their horſes heads muſt likewiſe reach to the ſhoulders of the next horſes before. So muſt you goe on, till you haue in like manner beſetted 2 a peece more on each ſide, ſtill opening the two ſides of the Rhombe proportionally. Thus done you haue

two ſides of the Rhombe which will be in this forme.

Then we to faſhion the two Rear ſides of the Rhombe of 9 horſe, placing them in this manner: The Lieutenant in the Rear angle di-

will be in this forme. manner : The Lieutenant in the Keure angle, directly opposite to, & yet looking toward the Capitaine; on either side of him forward toward the front 2 Horsemen, their horses shoulders lying even with the head of the Lieutenants horse. And after them the other 3; 3 on one side, and 3 on the other in the same proportion. And so have we the other two sides of the Rhombe in this forme. which be mo

The Tactics

ioyned to the former make the 4 sides of the Rhombe, in the framing whereof 20 of the 36 horse are bestowed. There remaine 16, which are thus to be ordered: Within the Rhombe we must at reasonable distance place a horseman behind the Captaine in right line, and in the manner as before lay 3 to him on each side. The number will amount to 7, and this is the figure.

Then another horseman is to be set at the same distance directly before the Lieutenant, and on each side of him two other toward the front, And these 12 horse ioyned together will fashion out a lesser Rhombe, comprehended within the sides of the first. So are 22 horse disposed of. The 4 that are left are thus to be ordered. In a right line againe after the Captaine, and at the former distance is another horseman to be set: Then 2, one of the one side, & the other of the other side of him, their horses heads reaching to his horses shoulders: thus the horseman left must supply the void place, standing directly before him that stood next before the Lieutenant.

And this is the true description of the Troope neither filing, nor ranking. I haue bene the longer in describing it, because the figure grauen is not fully to my minde, no horse head reaching to the shoulders of the horse, that standeth before him.

5. Polybius maketh it to consist of 64 men] Aelian tooke the number of 36 horse to frame this Rhombe, Polybius requireth 64. The number is not materiall, so the forme be obserued. If you make it of 64, you are to take 15 horse for the 2 front sides, and 13 for the 2 reare sides, and so in euery ranke within to diminish 2, as you did in the former.

6 Which file, but ranke not] The third kinde of Rhombe fileth, but ranketh not. It is easie to frame. Take what number of horse you please, and make a file, then lay to the distances betwixt horse, and horse of that file on each flanke two other files, each file conteyning one lesse in number than the first. And the heads of the files are to be laid right against the space which is betwixt the Captaine, and his follower, and the rest of the horses against the other spaces successively. In all the paires of files, that follow, and are laid to the flanks, you must still diminish a horse a peece, till you come to the points, which haue but one either of them. And of this abatement of one in euery file, both front, and reare, and flanks grow into points, and make a Rhombe: As if the euen number in euery file, a square battaile would arise. See the figure. This was the forme the Thessalians taught in, as appeareth by Aelian.

7 Turning to the right hand] The turnings of horsemen and footmen to the right, and left hand, are not termed by the same names. And the difference cometh of the diuersitie of weapons carried on the right, or left side. The horseman in his right hand held his staffe, in the left the reins of his bridle. The armed foote in his right hand his pike, on the left shoulder his Target. Hence was it, that when the horseman was commanded to turne to the right hand, they bid him turne to his staffe, the footman to his pike. When to the left hand, they bid the horseman turne to the Reins, the footman to the Target.

8 To ranke, and not to file] This is the last kinde of Rhombe, and it ranketh, but fileth not. It is made by a contrary way to the former. The filing Rhombe began at the front point, & re-re-point, & proceeded to the flanks. This beginneth at the flanke points, & proceeded to the front and reare. First therefore a ranke is to be laid of what number you list. Aelian would haue it of an euen number, but it will fall out as well in an euen number, as the figure sheweth. To the distances of this ranke you must lay 2 ranks more, one on either side, whole number must be one lesse a peece, than the former ranke. Thus continue laying ranks still toward the front, and reare, and in euery paire of ranks diminish one a peece, till you come to the points, either of which hure but one, namely the Captaine, & the Lieutenant, and the Rhombe will ranke, and not file.

CHAP. XX.

t. c. p. 46

u Polyb. lib. 4
217. 13.

The Tactics

ioyned to the former make the 4 sides of the Rhombes, in the framing whereof 20 of the 36 horse are bestowed. There remaine 16, which are thus to be ordered: Within the Rhombe we must at reasonable distance place a horseman behind the Captaine in a right line, and in the manner as before lay 3, to him on each side. The number will amount to 7, and this is the figure.

Then another horseman is to be set at the same distance directly before the Lieutenant, and on each side of him two other towards the front, And these 12 horse ioyned together, will fashion out a lesser Rhombe, comprehended within the sides of the first. So are 32 horse disposed of. The 4 that are left are thus to be ordered, in a right line againe after the Captaine, and at the former distance is another horseman to be set. Then 2, one of the one side, & the other of the other side of him, their horses heads reaching to his horses shoulders thus. The horseman left must supply the void place, standing directly before him, that stood next before the Lieutenant. And this is the true description of the Troope neither filing, nor ranking. I have bene the longer in describing it, because the figure drawn is not fully to my minde, no horse head reaching to the shoulders of the horse, that standeth before him.

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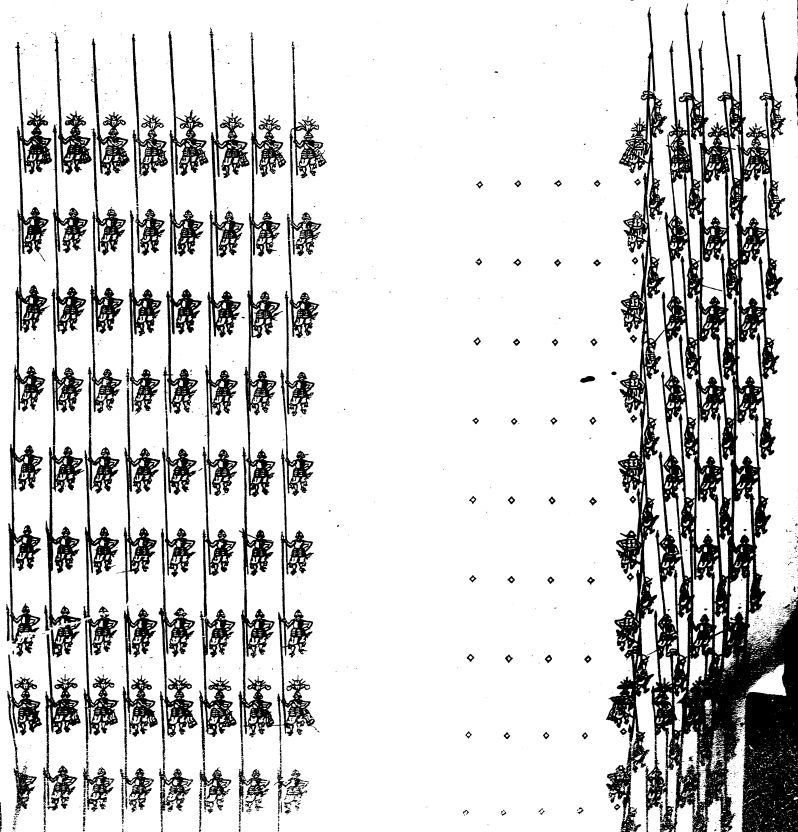
Turning to the right hand? The turnings of horsemen and footmen to the right, and left hand, are not termed by the same names. And the difference consisteth of the diversitie of weapons caried on the right, or left side. The horseman in his right hand held his staffe, in the left the raines of his bridle. The armed foote in his right hand his pike, on the left shoulder his Target. Hence was it, that when the horseman was commanded to turne to the right hand, they bid him turne to his staffe; the footman to his pike. When to the left hand, they bid the horseman turne to the Raines, the footman to the Target.

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CHAP. XX.

Cap. 20.
Countermarche by Ranke

The Countermarche in act



Internationale by Rautke

The Countermarch in action

the o-
rains

 τ_{12}

... ..

Tip. Target.

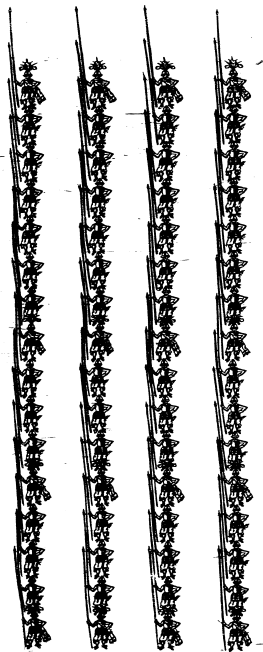
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Reaktion de la section communale
et l'opinion du conseil municipal
sur le projet de loi

P 220. 2. 22.

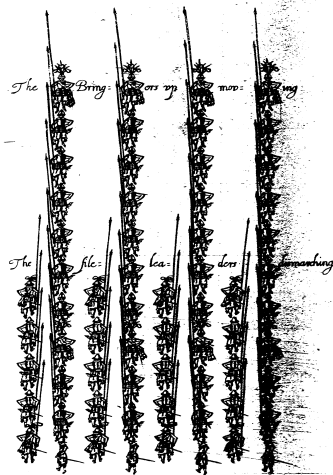
from in the first standing,

The Syrian Countermarch

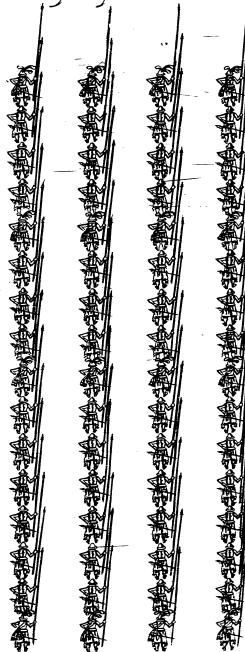


The Front in the first standing

The Countermarch in action

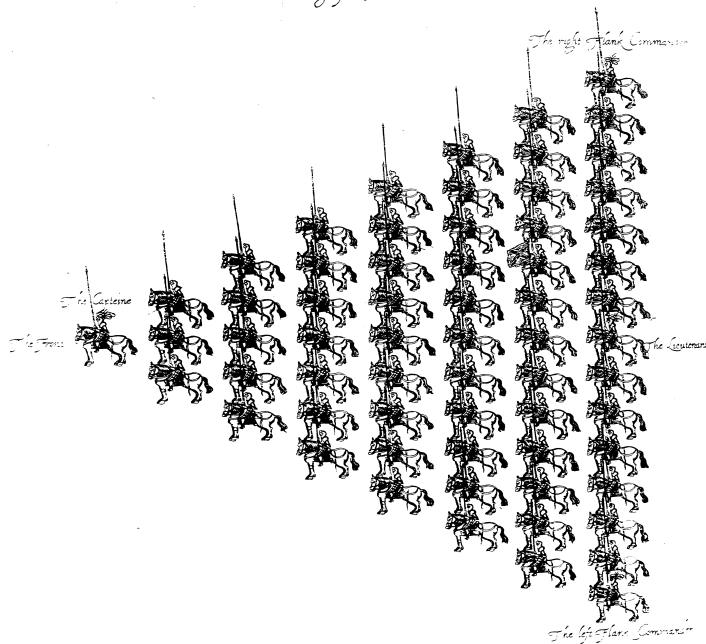


The front after Countermarch



The front ground legs after the Countermarch march

The ordinary horse troupe
consisting of 64.



The place of Horsemen in the field, the number of an usual horse troupe, the degrees, and name of the officers of the Horse in general.

CHAP. XX.

TH E Troopes of Horse, as the light-armed, are placed sometime before the Phalange, sometime on the right, or left hand in flanke of the Phalange, sometime behind the light-armed in the Reare. For our purpose, let them be placed in the Reare, and let the first Troope be of 64 men, and the first ranke thereof 15 Horse. The next 13. The next 11; and in all the rest abate 2, till you come to the last, which is one.

¹ He shall carry the Cornet, that standeth in the second ranke next the Ranke-Commander on the left hand. All the Troopes shall be 64 in number. The horsemen in all 4096. ² Two Troopes are called an Epitarchy of 128 horse. Two Epitarchies ³ a Tetrarchy of 256 horse. Two Tetrarchies ⁴ an Hipparchy of 512. Two Hipparchies ⁵ an Ephipparchy of 1024 horse. Two Ephipparchies ⁶ a Tels of 2048 horse. Two Tels make ⁷ an Epitagma of 4096 horse.

Notes.

Hierby of Squares and Rhombes, of all horse battailes amongst the Grecians. Now followeth the horse battaile of the Macedonians, of which Ælian hath thus afterward: This forme of horse battaile is called a wedge by Tacticks, and it was invented by Philip King of Macedonia, who placed his best men before, that by them the weaker might be held in, and enabled to the charge. As in a spear, or sword, the point whereof for reason of sharpness quickly piercing maketh way for, and leaveth in the middle blunt yare. I have spoken somewhat of the wedge in the two last Chapters. Ælian in this Chapter sheweth the number, and manner of placing it, and how many troupes ought to attend the Phalange, and under what officers, and degrees.

¹ Let the first troupe be of 64 men. The number of the wedge ought to be 64 horse. You make it beginning (as the Rhombe that ranked, but filled out) with a ranke of 15 horse. Then must you proceed toward the front, with an ever ranke of 13, the middle man, filing with the middle man of the first ranke, and the rest with the rest. And so you are to continue abating still two in every following ranke, till at last you come to one, who is the Commander of the Troupe, and standeth in the point of the front.

² He shall carry the Cornet. The place of the Cornet is not right set downe in the figure. He there standeth on the right hand of the middle man of the second ranke, whereas he should stand on the left. And you must not account the second ranke to be the ranke next to the Commander in the front; but as Ælian doth, that was secondly placed after the first consisting of 15, which was in the Reare. So that the Cornet is to stand in the next ranke to the Reare.

But there is nothing said concerning the distance, that ought to be betwixt horse, and horse. Of the distances betwixt horse, and horse is hath spoken in the 11 Chap. But of the distances betwixt horse, I find nothing, but generall words. That which wanteth in Ælian, I will supply out of other Authors. We must understand then, that two kinde of distances were observed amongst horsemen; one for marching, and other for fight.

In marching there ought to be 6 foute betwixt horse and horse. *Ælian* hath before given this distance to the foute. And that horse hold it likewise appeareth by *Polybius*.

Who comprehending *Callicrates* in describing the battaile betwixt *Alexander* and *Darius* at *Issos*, specially taxeth this: That he placed thirty thousand horse, and thirty thousand mercenaries, in fourteene furlongs of length, whereas the place was not capable of halfe the horse. His words have this sense; The order of horse, when they are prepared for fight, is for the most part 8 in depth. And there is a distance to be left in front betwixt every troupe, to give liberty to wheele and double-wheele. So that one furlong will containe 800 horse; and 10 furlongs 8000; 4 furlongs 3200: And eleuen thousand, and two hundred horse will fill the space of 14 furlongs in length. The words seeme at first somewhat obscure, being well weighed they will be cleare enough. *Polybius* saith, that these 800 horse were ordered 8 in depth, and that they took up a furlong of ground in length. He must be therefore of them a hundred files. For a hundred files of horse a peece, will arise to 800 horse. Compare then these 100 files, (the length of the battaile) to the length of a furlong. And seeing a furlong containeth 400 Cubits, or six hundred foute, every file shall have 4 cubits, or 6 foute space betwixt them. And so the distance betwixt file and file in a march will be 4 Cubits, or 6 foute. The other distance of three foute appeareth in *Leo*, whose words stand thus: Put the case, that the battaile is of 600 horse in length, and 500 in depth, seeing that every horse in length of the battaile possesseth three foute in breadth, the number of foute will amount to 1800; And seeing againe that every horse in depth possesseth 8 foute, there will arise herof 4000 foute; so that in the foure-sided figure, out of the length of 1800, and the depth of 4000 foute arise 720 Myriades of square foute. And the Perimeter alone of the outward foure sides containeth 11600 foute. And because 6 foute make a fathome, and a 100 fathoms make a furlong, and 7 furlongs, and a halfe, make a mile, the whole Perimeter of 11600 foute will come to two mile, and a halfe, and neare a 10th part. In this distance therefore according to the closest order, or shutting, the thirty thousand horse are contained. But if they stand not so close, you must alter your account according to the thinnesse, and out of the greatnesse of place coniecture of the multitude of the people.

So *Leo*. Which place albeit it seeme to require a large interpretation, because many things worth noting offer themselves in it; yet for this time I will only insist upon that, which I first preponnd, that is the distance of three foute betwixt horse, and horse, when they goe to charge (for that is the meaning of *Leo*, when he speaketh of the closest order) which distance is expressly here set downe. And the matter will yet seeme more cleare, if we adde the words of *Leo* in the Paragraph next, but one, to this, which are these: The oldest Tactics in ordering of foute Battailes give every man at the first distance foure Cubits; when the battaile is closed two Cubits; when ferred and shut one Cubit. Out of which proportion a Scout may exactly discover by the quantitie of the place the number, not onely of horse, but of foute also. These oldest Tactics that *Leo* mentioneth agree with *Ælian*, as we have seene. But where the foute have three distances, the horse are to have but two. The open order of six foute they ought to have, and likewise that of three foute, nearerer they cannot come together, because of the breadth of their horse, and because they are to have roome sufficient for the wielding of their weapons.

All the Troupes are to be in number 64. A Troupe consists of 64 men, and so the Phalange belong 64 Troupes, as the Phalange containeth 64 Ensignes, or Sym-
tagma's

tagma's of armed foute. To which Ensignes the 64 Troupes of horse are proportioned. Their place is according to *Ælian* after the light-armed; not on troupe after, or behind another, but one beside another, in one front; and that front in a right line, which stretcheth out, as long as the Phalange of armed it selfe. Now the files of the armed being 1024 in number, and the number of the horse in the last ranke (which containeth the length of the Horse-battaile, and should answer the number of files) but 960, we must seeke out a proportion to make the length of both equal one to another. The difference then betwixt them in length is 64 men, which in order take up 192 foute. And where there goe foure Phalangarchies to a fourfold Phalange, and 16 troupes of horse are placed behind enemy Phalangarchie, we must divide these 192 foute into foure parts; every of which parts will amount to 48 foute, and give to each troupe three foute distance one betwixt another (for distances betwixt one troupe, and another, *Polybius* holdeth necessary) and so shall the 16 troupes of horse take up as much ground in length as a Phalangarchie. The one containing 256 files in length which occupy 768 foute of ground, and the other 240 men in the last ranke, which occupy 720 foute. To which adding 48 foute of distance, there ariseth the even number of 768. And so shall the 64 troupes of horse be even in length with the fourefold Phalange.

The names of the Offices, and Commands of the Horse follow, wherein as I before noted in the foute, we must not presse too neare the property of words, but take them, as they have become used among Soldiers.

3 Two troupes are called an Epilarchie. One troupe is called Ile, and the Commander an Ilarch; for so he is termed before in *Ælian*. Two troupes an Epilarchie, and the Commander an Epilarch, as it were a Commander over two Iles, troupes. He hath 128 Horse under his command. Cap. 18.

4 A Tarentinarchie. Of Tarentines mention is made in the second Chapter. The name of a Tarentinarchie is not given to this Troupe, because it consisted of Tarentines, but because of likelihood the Tarentine horsemen had so many in a troupe. Let it be, as it will, it signifieth here a troupe of 256 Horse.

5 An Hipparchie. Properly signifieth the command of horse, and *Xenophon* useth the word Hipparch for the General of horse; but *Ælian*, and the Tactics use it for the command of 512 horse.

6 An Ephipparchie. As it were a command over two Hipparchies, or over 1024 horse.

7 A Telos. The name of Telos is given both to a body of horse, and to a body of foute. A Merarchie was called by some Telos (saith *Ælian* before) and contained 2048 armed. The Telos of horse containeth 2048 horse. So the bodies are equal in number. The word sometimes signifieth a Command, or Dignitie, from which signification this body, as seemeth, hath the name.

8 Epitagma. The whole body of light-armed was called an Epitagma, which name is given likewise to the whole body of horse comprising 4096 horse. It may be they are both so called, because they are placed behind the Armed, as I noted before. For that place *Ælian* assigneth unto them.

The diligence to be used in choice, and exercise of the best formes of Battails.

CHAP. XXI.

THE Inventions and conceits of those, that lived in old time, about *Troopes of Horse* are declared, in what forme every one was cast, and for what cause some used one forme, some another. Now it behoueth (as in things that carry with them great difference) not carelessly, and negligently, to rely vpon the bare precepts; but rather by daily exercise to make tryall of every kinde of figure, and so attayning to the perfect knowledge of that, which is readiest, and of most advantage, to admit and receive it in true fight. For it were great simplicitie, considering in matters of lesse importance men by curious inquiry reach to the exact finding out of many things, herein not to ground vpon perfect and sure experience, before we come to ioyne with the enemy.

Troopes may be enlarged or lessened, as it shall seeme convenient to him, that hath the command.

Of Chariots; the names, and degrees of the Commanders.

CHAP. XXII.

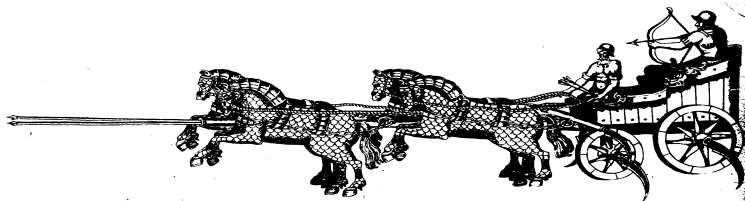
AS for ordering *Chariots* and *Elephants*, albeit they are worne out of vse, yet to make vp the measure of this discourse, I will remember their names, as they are set downe in ancient writers. In the Art of ordering *Chariots* for the field, they call two *Chariots* a ¹ *Zygarchy*; Two *Zygarchies* a ² *Zyzygi*; Two *Zyzygies* an ³ *Epyzyzygi*; Two *Epyzyzygies* an ⁴ *Hartamarchy*; Two *Hartamarchies* a ⁵ *wings*; Two *wings* a ⁶ *Phalange*.

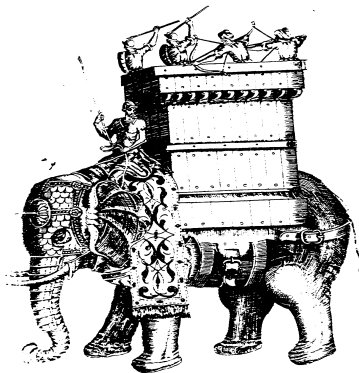
A man may vse many and sundry *Phalanges* of *Chariots*, and yet retain the same names in every *Phalange*. Some haue framed simple *Chariots* to serue with all; other some haue armed them with *Sithes* prominent and standing out on each side.

Notes.

There were two kinde of *Chariots* used of ancient time, the one a simple *Chariot*, the other a *Chariot* armed with *sithes*. The first kinde was used by the Heroes (as they terme them, that is the renowned Souldiers of old, such as were Achilles, Hector, Cynus, Aneas, Turnus) as appeareth by Homer, Virgil, Ovid, and other Poets. The last was brought in by the Generalls of later times, especially by those that reigned in Asia, and in Africa. For the ^m Europeans haue counted them fruitlesse, and vaine mockeries, and amongst them you shall hardly finde any mention of *Chariots*. Elian toucheth them onely, because both they, and *Elephants* were in his time growne out of vse. Wherefore I meane likewise to passe them over sleightly, onely directing the Reader, that is desirous to vnderstand their manner of fight to places of Historie, where they are mentioned. And first see for their

Forme.





m. l. v. decad. /
4. lib. 7. 142. B.

Form. Xenoph. Cyrop. lib. 6. 152. D. E. & 156. B. C. de exped. Cyr. lib. 1. 264
A. B. Liu. decad. 4. lib. 7. 142. A. Diodor. Sicul. lib. 17. 596. Quint. Curt. lib. 4. 119
& lib. 8. 371.

Their violence, Diod. Sicul. lib. 17. 593.

Their place in the bataille, Xenoph. Cyrop. lib. 6. 168. C. D. Liu. decad. 4. lib. 7.
142. A. Diod. Sicul. lib. 14. 408.

Remedies against them, Diodor. Sicul. lib. 17. 592. 593. Xenoph. de exped. Cyr.
lib. 1. 265. Liu. decad. 4. 142. Quint. Curt. lib. 4. 141. Plutarch. in Sylla.

I come to the names of the Commands of Chariots.

1 A Zygarchie] The command of two Chariots; as it were a yoke of Chariots.
2 A Syzygy] The command over two yokes, as it were, of Chariots yoked to-
gether; that is over 4 Chariots.

3 An Epizygy] The command over four yokes of Chariots, that is over eight
Chariots.

4 An Harmatarchie] Properly the command of Chariots. But used by Ælian
for the command of 16 Chariots.

5 A wing] As soote, so Chariots, and Elephants, had their wings of bataille. To
the wing went 32 Chariots. Yet finde I this order of imbatailing Chariots no where, but
in Ælian. He that will, let him read the places, that I have noted before, for the ordering
of Chariots. Notwithstanding I can not doubt, that the names given here by Ælian, are
taken out of ancient writers.

6 A Phalange] It consisteth of 64 Chariots; and wee here see, that Chariots also
had their Phalanges, as well as soote, and Horse.

Of Elephants; the names, and degrees of
their Commanders.

CHAP. XXIII.

Touching Elephants, he that is Commander of one Elephant is called 1 Zarcha;
Of two 2 Therarcha, and the body 2 Therarchy; Of foure 3 Epitherarcha, and
the body an Epitherarchy; Of eight 4 Harcha, and the body an Harchy; Of 16 5 E-
lephantarcha and the body an Elephantarchy; Of 32 6 Keratarcha, and the body a
Kerarchy. That which consisteth of 64 wee call 7 a Phalange of Elephants, as if a
man should name the Commander of both the wings Phalangarcha.

Notes.

The use of Elephants was greater amongst the people of Asia and Africa. Those of
Europe esteemed them not much. And yet we finde, that they were brought into the
field by the Romans also; who first saw Elephants in Italy in the warres they had against
King Pyrrhus. * The Indian Elephant was preferred before the African for greatnesse
of body, strength, and courage. Many things are written concerning the service of Ele-
phants. But because Ælian toucheth no more, then the names of the bodies, and the de-
grees of Commanders, I will only note such things, as I finde concerning them in histories.
Their kinde of armor, and furniture I have taken out of Liuy, and expressed them as
weere, as I could, in figure.

For

Liu. decad. 4.
lib. 7. 141.
Polyb. lib. 9.
425. C. D.

For their power, strength, and manner of fight, see Diodor. Sicul. lib. 17. 609. & lib. 19. 717. Polyb. lib. 1. 5. D. & lib. 5. 425. C.

Their place in battaile, Diodor. Sicul. lib. 17. 685. Arrian. lib. 5. 111. Liu. decad.

4. lib. 7. 141. B. Appian. in Syriac. 107. Polyb. 1. 34. D.

The distance one from another. Arrian. lib. 5. 111.

Light armes in the distances betwixt Elephant and Elephant, Diodor. Sicul. lib. 17. 609. & lib. 18. 695. & lib. 19. 685. & 716. Plurarch. in Pyrrho.

Remedies against Elephants, Diodor. Sicul. lib. 18. 665. & lib. 19. 717. Polyb. 1. 1.

42 A. Hirt. de bell. African. 416. Liu. decad. 3. lib. 7. 194. C.

I have noted before the impropriety of names given to militarie bodies as well in the armed ana, the light armed foote, as in horse & r super, and in Chariots. That defect is no lesse in Elephants. The Commanders and commands of them hauing names, which were at first large, and improper enough, but afterward made good by use, and received by the Tactics as significant to expresse the things, for which they were inuented. The first is given to him that is to command one Elephant. Who is called

1. Zoarchos] The Commander of a liuing creature, that is of one Elephant. The next is

2. Therarchos] A Commander of Beasts; which name is appropriated to him, that commandeth two Elephants, and the body is selfe so named a Therarchie.

3. An Epitherarcha] Hauing the authoritie ouer the Therarchie and the body is called an Epitherarchie comprizing foure Elephants.

4. An Ilarch] As it were the Commander of a troupe; and the body is called an Ilarchie. It is commonly applied to horse, and signifieth a horse troupe, and Ilarcha the Capitaine. But here Ilarcha signifieth the Commander of 8 Elephants.

5. An Elephantarch] A Commander of Elephants; as though the other bodies before mentioned were not Elephants. Such straights are men often times driuen onto in deuising new names for new things, which notwithstanding passe afterward and growe familiar by use. Elephantarcha commandeth 16 Elephants, and the command is called an Elephantarchie.

6. A Keratarch] The Commander of a wing, the body a Keratarchie, hauing in it 32 Elephants. A wing of Chariots had as many.

7. A Phalange] This is the greatest body and consisteth of 64 Elephants. But as Chariots may be ordered into many Phalanges, and yet the same names retained in euery one of the Phalanges, so it is in Elephants. For that armies haue had in them at once a

c Polyb. lib. 1. boue 64 Elephants appeareth by Histories. Polybius, and Diodor Sicul. testifie, " the first that the Carthagineans, " the last that King Porus against Alexander had the one 140, the other 130 Elephants in their armies. " The same Polybius saith that Ptolomey had against Antiochus 73 Elephants in his armie, and Antiochus 102. And Plutarch reporteth that Androcottus, King of a part of India, gaue to Seleucus at one time 500 Elephants.

c Polyb. lib. 1.

29. B.

d Diod. Sicul.

lib. 17.

c Polyb. lib. 5.

421.

f Plutarch. in

Alexand.

The names of military motions expressed
in this booke.

CHAP. XXIV.

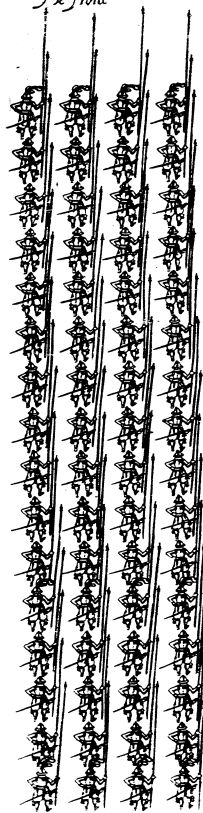
THUS haue we set downe in particular the kindes of perfect Forces together with the severall names of euery body; Which being premised, it seemeth
fit

*Metabole or Faces turned
to the right hand*

*Turne or one Turning of
Faces to the
right hand*

The first standing

The Front



The Front



The Front

of Ælian.

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fit to deliuer the words of exercise, that when the Commander, shall will any thing to be done, the Souldier in daily experience acquainted before with the signification of euery of them, and with the mouing in each figure may easily performe and execute, whatsoeuer is commanded.

There is a motion called *Clipsis* whereof one kinde is to the Pike, the other to the Target; Another is called *Metabole*; another *Episprophie*; another *Anastrophe*; another *Perispassmus*; another *Eperispassmus*; besides we lay to *file*; to *ranke*; to returne to the first posture; to *countermarch*; to *double*. Likewise we vie the words *Induction*; and *Deduction* to the right, or left hand; a *broad-Phalange*; a *deepe-phalange*; and *vnien-fronted Phalange*; and *Parembolae*; and *Protaxis*; and *Entaxis*; and *Hypotaxis*; and *Epitaxis* and *Prosfaxis*. The signification of which words I will shortly deliuer. And yet I am not ignorant, that the precepts of warre are not by all *Tacticks* expressed in the same tearmes.

Notes.

A Ælian in the Chapters precedent, hath numbred up all kinds of forces, as well foot, as Horse, and Chariots, and Elephants, that in ancient time were accounted necessary for warre. And hath giuen them their armor, and furniture, and distinguished them into militarie bodies, and imballailed them, and taught the distances, that they ought to hold in fight. It followeth now that he speake of motions military; which are the life of an armie, and onely giue meanes of victory; and without which all preparation of forces is vaine, and availeth nothing in the field, nor to the end, for which they were leuied. This Chapter then containeth the names of these motions; the following Chapters the particular explication of them. To which we will note, what we finde in ancient writers. For the signification of the words, I referre them to the severall Chapters, where they are expounded.

*Of turning, and double turning the Souldiers faces,
as they stand embattailed.*

CHAP. XXV.

Clipsis or turning of the face, is the particular motion of euery Souldier declining his face either to his Pike, that is to the right hand, or to his Target, that is to the left hand. The vse of it is, when the enimie sheweth himselfe in *flanke*; to encompass our wings, or else to charge vs: or for some other cause, whereof I will speake in convenient place. 2 Two turnings of the face towards the same side transerre the sight of the Souldier to the reare of the battaile. And this kinde of motion is called *Metabole*: being also vsed either to the Pike, or to the Target. In the first standing the mouing of the Souldiers face toward the Pike is called *Clipsis*, the second mouing the same way *Metabole*. For *Metabole* is the conuersion of euery mans face particularly to the place, which was behinde his backe. And the same that *Metabole* is in ech severall Souldier, the same is *Perispassmus*, or wheeling about in the whole battaile. There are 4 two kinds of *Metabole*, the one from the enimie, the other to the enimie. *Metabole* is defined to be a changing of euery mans face in particular from the front to the

reare;

reare; or contrariwise. Turning about the enimie is, when the Souldier turneth his face twice towards the Pike; To the enemy, when hee turneth twice towards the Target.

Notes.

Foure kinde of Motions are set downe by *Ælian* whereby upon any occasion the battaile may be somewhat changed: Turning of faces, countermarch, wheeling, and doubling, whereof the first may be used, in what order I leave your battaile standeth the second only in open order, the third in close order only, the fourth either in close, or open order. Cliffs, or turning of faces, wherof this Chapter treateth, albeit it may be brought in also in open Order; Yet it is not done for the most part but in close order, and then especially, when none of the other motions have place. The Grecians alwaies consented to bring their file Leaders, that is their best men, to fight, in open Order they chose to countermarch; In close Order, having place, to wh. ele their battaile about, and so turne the face of it against the enemy. If they could doe neither of these, they came to the last remedy, which was turning of faces of every particular man in the battaile.

1 Cliffs, or turning of faces] This motion is of lesse paines then any other, but of no lesse importance, or necessitie. In the rest the Phalange changeth the place, or the forme: In this it holdeth both, and yet is ready for any attempt of the enemy. Onely every Souldier in particular turneth his countenance to the right or left hand, as he is commanded. To turne his face to the Pike is to turne to the right hand, because that hand bore the pike, to turne to the Target is to turne to the left hand, because the Macedonians carried their targets on their left shoulder. For the use of this turning of Faces, *Ælian* saith, It hath place when the enimie sheweth himselfe in flanke

2 To incompasse, our wings] Cliffs is no more then bearing faces to the right, or left hand, that is to our wings. When then we finde our enemies, to incompasse our right wing, wee turne our faces, and weapons that way to receive him: to the left, when he cometh to charge us on that side. If on both sides, then turne wee the faces of our Phalange halfe to the right, halfe to the left hand; which is the Antistonus Phalange wherof *Ælian* speaketh hereafter. Briefely, there is almost none of the marching Phalanges which are afterward described, but it hath neede of this motion. Besides if upon any occasion the Phalange be to move from any of the flanks, you are only to command Turning of faces to that flanke, and then to lead on. I will give an example, or two. * Alexander at Arbela having imbattailed his armie to fight with Darius, had intelligence, that Darius had throwed the ground bewixt the two armies with Calthropes. He commanded therefore the right wing, which himselfe led, to turne faces to the right hand, and follow him, to the end to go round about, and avoide the places, that were sowed with Calthropes. Darius marching against him to the left hand, disioyned his troups of horse, and Alexander taking the advantage, and giuing in quickly betwixt the spaces, put Darius to flight. If Alexander had marched on with the right front, he had fallen upon the Calthropes. To avoide them, he used the benefit of the right front, and turning faces to the right hand he went on, untill hee had passed the danger, and turning faces to the right hand he went on, untill hee had passed the danger, and then turning againe to the first posture, hee desired the battaile betwixt Machanidas, and another example is in * Polybius, who describing the battaile betwixt Machanidas, the Lacedemonian Tyrant, and Philopœmen the Achaean Generall, telleth, that Machanidas having in the left wing put the Achaean mercenaries to flight, followed hard the chafe. Philopœmen as long, as there was hope, indeuoured by all means to stay his men: when he saw them utterly defeated, hee hastened to the right

right wing, and perceiving the enimie buie in chafe, and the place voide, where the flight had beene, commanding the first *Acrotaries* to turne their faces to the right hand, he led them on with high speede, not yet breaking the order of their imbrailing. And quickly leaping upon the forsaken ground, hee both cut betwixt them, that gaue chafe, and home, and withall got the advantage of the upper ground against the left wing of the armed. Whereby hee obtained the victory. If Philopœmen had in this action used wheeling of his battaile, which onely was the other motion, which would have served his turne, besides the trouble (menesse) of the winning about, he should have beene forced to have used two wheelings, and so failed of the celerity, which was at that time requisite. Faces were turned in a price, and he made himselfe Master of the ground, hee desired, before hee could have wheeled once his battaile.

3 Two turnings of the Souldiers face] Cliffs, or turning faces to the right, or left hand, consisteth of one turning and mouth no further, then the side. If the motion be to the reare, it hath two turnings, and is called Metabole, which is defined to be a changing of every mans face in particular from the front to the reare, or contrariwise. And as wheeling of the whole body carrieth about the fronts of the battaile to the reare, so doth Metabole turne the face of every particular Souldier, and maketh him loose from the front to the reare. The word properly signifieth a change, which happeneth herein, when the souldiers are changed from the front to the reare, or contrariwise. The use of Metabole is principally to resist the enemy that gives on upon the reare. * So Pyrrhus being entred the Citie Argos with a few, and overpressed with multitude, retired by little and little, and defended himselfe, oftenturning his and his souldiers faces against the enemy. * So the armie of Cyrus the elder retiring from the wallies of Babylon, oftenturning about their faces to the left hand, and waited their enimie, who were reported to be on foote, and ready to come and charge them. And if the enimie assault both the front, and reare, it hath bene the winner to continue halfe the souldiers in each file with their faces to the front, and command the other halfe to turne their faces to the reare against the enimie behind. And this forme is called Phalanx Amphistomos described by *Ælian* cap. 38. And sometimes it is used to speed our march, and prevent the enimie, as was said before of Cliffs. * Agellus made an incursion into the Territory of the Thebans, and finding a Trench, and Ramper cast up by the Thebans for defence of their Countrey, and onely two narrow waies betwixt, he cast his armie into a hollow Plinthium, or square, and led it against the left hand passage, whither all the Thebans flocked for defence. But hee turning about faces from the reare, hastened away, and gained the other passage, where no man was present to resist, and entering spoiled the Countrey, and returned without impeachment.

4 There are two kinde of Metaboles] Before we rehearse two kinde of turnings of faces about, one to the pike, the other to the target, here is added two more, one from the enimie and the other against the enimie; which are all one indeed, and differ onely in name. What the true meaning of these turnings should be, I am in doubt, *Ælian* expounding them one way, Suidas another. *Ælian* esteemes them by the right, and left hand, Suidas, albeit he have that signification also, esteemes them by the front and reare. Therefore Suidas defines the turning from the enimie to be a turning about; toward the reare: that against the enimie, a turning about toward the front. *Ælian* would have the first to containe two turnings toward the right hand, the second two turnings toward the left. I for my part, dissent rather to *Ælian*. For touching the turnings of Suidas, I cannot yet understand, why turning toward the reare should be a turning from the enimie; or toward the front a turning to the enimie: Considering that whether

* Polyen. lib. 4.
in Alexand.
§ 17.

* Polyb. lib. 11.
§ 34.

* Xenoph. Cy-
ro. lib. 7. 189.

* Polyen. lib. 11.
Agellus.

whether sooner you turne faces, the enemy is imagined to be there: faces and weapons being to be opposed alwaies against the enemy, which is the onely end of turning. Alians opinion seemeth to haue more probability in it, at least if I conceiue the right reason. For I take it thus: That seeing the Græcians (as the Romans likewise) were Targetiers, and caried their targets on their left side, and in fight advanced that side alwaies nearest the enemy, which they sought to cover with their targets, that therefore the turning about to the enemy, was called turning to the Target; as contrariwise turning to the right side, on which side the Pike was caried, and which being naked of such defensive armes was called the open side, and therefore further remoued from the enemy, might for the same cause be termed turning from the enemy. So that I take turning about to the enemy, and turning about to the target to be all one, as also turning about from the enemy, and turning about to the Pike, howsoever the name differ. This is my coniecture, which I shall imagine to be true, till I finde some man, that will be pleased to giue me a more probable reason: I only adde now the words of command in this motion.

Faces to the right hand.
Faces to the left hand.
Faces about, to the right or left hand.
The figure sheweth the manner.

} As you were.

Of wheeling, double, and treble wheeling of the battail,
and returning to the first posture.

CHAP. XXVI.

Epistrophe (or wheeling) is when the battail being so closed, that no man can turne, or twice turne his face by reason of the neerenesse of man to man, it wholly, and jointly wheeleth (as a ship, or some other body caried about) the order thereof remaining vndissolued. When the wheeling is to the Pike, we warne the right-corner-file-leader to stand still (as it were the hooke of a doore hinge) and the rest of the battail proceeding forward to turne about the same file-leader like the doore. In the same manner is wheeling to the Target; it may be thus defined: *Epistrophe* is, when shutting the battail by gathering close the Followers, and Side-men, we turne it wholly (as the body of a man) toward the Pike, or Target, it being caried about the corner-file-leader, as about a Center, and, changing the place of the front, transference the countenance of the souldier to the right, or left hand; the followers and sidemen euery one remaying in file and ranke as before. How it is to be done I will shew hereafter.

Anastrophe, or returning to the first posture, is the restoring of the wheeling to the place, where the battail first stood close, before it beganne to wheele. *Perispalmos*, or wheeling about, is the motion of the battail in two wheelings, so that thereby the front commeth to the place of the reare. *Eperispalmos*, or treble wheeling, is the motion of the battail in three wheelings, so as, when it turneth to the Pike, the front commeth about to the left flanke; when to the Target, it commeth about to the right flanke.

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This Chapter hath a diuers kinde of turning from the other mentioned in the last Chapter, which for distinction sake, is called *Epistrophe*, or wheeling. The other turned no more, then the souldiers faces; euery man yet keeping the same ground, he had before. This wheeles the whole body, and changeth the place of the Phalange either to the right, or left hand, or to the reare. And as there was in the turning of issues a particular motion of euery particular souldier to the right, or left hand, called *Clisis*, and an other turning about called *Metabole*: so is there in this a general wheeling of the whole body to the right, or left hand, called *Epistrophe*, and an other wheeling about to the reare called *Perispalmos*. But let vs heare the description.

Epistrophe (or wheeling) is, when the Battail] Shortly *Epistrophe* is no more, then the first turning of the battail to the right or left hand. In doing whereof first the files must be closed to the hand, you meane to wheele, then the ranke. Then the corner file-leader on the same hand is to stand still, when all the rest keeping their files, and ranke closed, to turne to the same hand jointly about the Corner-file-leader circle-wise, who is to moue by little, and little, till he haue turned his face to that side, which was intended. And when the first ranke is euen with him, and the rest wheeled enough to the same hand, they are to stand still: The words of the definition of *Epistrophe* (or wheeling) are plaine enough in Alian; I neede no exposition. Now because in exercise we lie not upon one forme of motion alone, but acquaint our souldiers with all the kindes; it is necessarie to bring the body againe to the first place, to the end we may proceede in the rest. This reducing to the first Posture is called *Anastrophe*, by which the battail returneth, but by a contrary hand, to that, to which the *Epistrophe* was made. And but for changing the hand the wheeling backe againe is all one with the wheeling forward. We shall see hereafter how it is done. To bring the battail to haue the front, where the reare was, you must use a double wheeling. And that is called *Perispalmos*. Which commeth of two *Epistrophes*, and is made either to the right, or left hand. Onely it must be obserued, that if the *Perispalmos* (or wheeling about) be to the right hand, the *Anastrophe* (or reducing to the first posture) must be to the left. Contrarie it is if the *Perispalmos* were to the right hand.

Eperispalmos] I could neuer hitherto conceiue any use of a treble wheeling (for so Alian takes the word) vnlesse a *Perispalmos* were first made, and the battail had the front already brought to the reare, and so an *Epistrophe* added from the reare to the same hand. Otherwise seeing that one wheeling is sooner made, then two, and therefore sooner then three, I see no neede of three wheelings, especially seeing we may doe that, we desire with one. For example, let vs wheele our battail: thrice to the right hand, the front will come to be in the place of the left flanke. The same will be performed as well with one whelung to the left hand. Et frustra super plura, quod potest fieri per pauciora, especially in matter of warre, where the least moment of time often carrieth the whole business. The like may be said of *Eperispalmos* to the left hand.

The use of the motions of wheeling, and double wheeling, is, when the battail being closed, and the enemy coming to assault you in any other one place, then the front, you seek to bring the best men to fight. For if you be to be charged in two places at once, or more, wheeling helps little: except it be to turne the front to one enemy, and in that case you onely shift, to turne faces against them, that came to charge, on what side sooner they come. Examples of these two motions, I meane *Epistrophe*, and *Perispalmos* meete vs almost in euery Greeke Historie. Of which I will represent one, or two, especially of the latter;

whether sooner you turne faces, the enimie is imagined to be there's faces and weapons being to be opposed alwaies against the enimie, which is the onely end of turning. Alians opinion seemeth to haue more probability in it, at least if I conceiue the right reason. For I take it thus: That seeing the Græcians (as the Romans likewise) were Targetiers, and caried their targets on their left side, and in fight advanced that side alwaies nearest the enimie, which they fought to cover with their targets, that therefore the turning about to the enemy, was called turning to the Target; as contrariwise turning to the right side, on which side the Pike was caried, and which being naked of such defensue armes was called the open side, and therefore further removed from the enemy, might for the same cause be termed turning from the enemy. So that I take turning about to the enemy, and turning about to the target to be all one, as also turning about from the enemy, and turning about to the Pike, howsoever the name differ. This is my coniecture, which I shall imagine to be true, till I finde some man, that will be pleased to giue me a more probable reason: I only adde now the words of command in this motion.

Faces to the right hand.
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Epistrophe (or wheeling) is, when the Battaille] Shortly *Epistrophe* is no more, then the first turning of the battaile to the right or left hand. In doing whereof first the files must be closed to the hand, you meane to wheele, then the ranks. Then the corner file-leader on the same hand is to stand still, then all the rest keeping their files, and ranks closed, to turne to the same hand insensibly about the Corner-file-leader circle wise, who is to moue by little, and little, till he haue turned his face to that side, which was intended. And when the first ranke is euen with him, and the rest whorled enough to the same hand, they are to stand still: The words of the definition of *Epistrophe* (or wheeling) are plaine enough in Alian; I neede no exposition. Now because in exercise we relie not upon one forme of motion alone, but acquaint our souldiers with all the kindes; it is necessary to bring the body againe to the first place, to the end we may proceede in the rest. This reducing to the first Posture is called *Anastrophe*, by which the battaile returneth, but by a contrary hand, to that, to which the *Epistrophe* was made. And for changing the hand the wheeling backe againe is all one with the wheeling forward. We shall see hereafter how it is done. To bring the battaile to haue the front, where the reare was, you must vse a double wheeling. And that is called *Perispalmos*. Which commeth of two *Epistrophes*, and is made either to the right, or left hand. Onely it must be obserued, that if the *Perispalmos* (or wheeling about) be to the right hand, the *Anastrophe* (or reducing to the first posture) must be to the left. Contrarie it is if the *Perispalmos* were to the right hand.

Triperispalmos] I could neuer hitherto conceiue any vse of a treble wheeling (for so Alian takes the word) vnlesse a *Perispalmos* were first made, and the battaile had the front already brought to the reare, and so an *Epistrophe* added from the reare to the same hand. Otherwise seeing that one wheeling is sooner made, then two, and therefore sooner then three, I see no neede of three wheelings, especially seeing we may doe that, we desire with one. For example, let vs wheele our battaile thrice to the right hand, the front will come to be in the place of the left flanke. The same will be performed as well with one whirling to the left hand. Et frustra sit per plura, quod potest fieri per pauciora, especially in matter of warre, where the least moment of time often carrieth the whole business. The like may be said of *Triperispalmos* to the left hand.

The vse of the motions of wheeling, and double wheeling, is, when the battaile being closed, and the enemy comming to assault you in any other one place, then the front, you seek to bring the best men to fight. For if you be to be charged in two places at once, or more, wheeling helps little; except it be to turne the front to one enemy, and in that case your onely shift is, to turne faces against them, that come to charge, on what side sooner they come. Examples of these two motions, I meane *Epistrophe*, and *Perispalmos* meete vs almost in euery Greeke Historie. Of which I will represent one, or two, especially of the latter;

a Plut. in Pyrrh.

latter; the rather because practise giueth both light, and life to precepts. * Plutarch recounteth, that after King Pyrrhus, had in vaine assaulted Sparta, he was invited by an Arginian named Arislaem to receiue Argos into his protection, and that hee marched thitherward with his armie. Arislaem the king of Lacedemonia laying ambushes for him, and taking the principall streights, by which he was to passe, charged his reare, wherein the Galatians and Molossians were. When Pyrrhus heard the bruite and noise, he sent his sonne Ptolemy with the band of Companions to the bruite and noise, he sent his sonne Ptolemy with the band of Companions to the medly being sharpe about Ptolemy, and the chosen Lacedemonians commanded by Eualcus standing close to their busines, Oroesus a Candiot of Apera, valiant of his hands, and swift of foote, ruining crosse against the young Prince gaue him a deadly stroke and ouerthrew him. His fall made the rest to fle. And the Lacedemonians hauing the victorie, and following the chafe came into the Champian ground still killing but not remembering they were not followed with armed foot. Vpon whom Pyrrhus, hauing euen then heard of, and being much moued with the death of his sonne, wheeled about the Molossian horsemen. And himselfe first aduancing vpon the spurre imbrued himselfe with the slaughter of Lacedemonians. He alwaies seemed mighty, and terrible in armes; but then he exceeded himselfe in daring and valor. For turning his Horse vpon Eualcus who shunning him, thrust aside, and with all strooke at his bridle hand as he passed by, and wanted but little of cutting it off. But missing the hand, he light vpon the raines, and carued them quite a sunder. Pyrrhus with all strooke him thorough the body with his Lance. Then leaping from his horse, and fighting a foote, hee cut in pieces the chosen Lacedemonians, that fought to recover the body of Eualcus. This was the fight that Pyrrhus made by wheeling about his Horsemen against the Lacedemonians, that followed vpon his Reare. Another example of Wheeling about is reported by Polybius, and it is of Amilcar Annibals father, this is the history. The mercenary souldiers of the Carthaginians revolted from them, and ouerthrew some of their Generalls, and shut them vp within the Citie of Carthage, possessing both other streights, that led into the Countrey, and also a bridge laide ouer a riuer called Atacar, which riuer was not passable, but by that Bridge. Besides, they built a Citie for defence of that Bridge. Amilcar seeking to dislodge the enemy from that Bridge, and hauing no way to come at them conueniently; obserued, that when certaine windes blew, the mouth of the riuer toward the sea was commonly filled vp with sand, and would giue passage sufficient for his armie. Finding then a fit time, hee put ouer his army in the night, and before day, or ere any man knew of it, made himselfe Master of the passage; and presently led against them, that held the bridge. Spendius (he was one of the chiefe Rebels) hearing thereof, aduanced to meete Amilcar in the plaine, and both ten thousand from the Citie at the bridge foote, and fifteen thousand more from Nica, came out one to aide another, thinking to wrappe in the Carthaginians betweene them; who were not about ten thousand Souldiers of all sorts, and 70 Elephants. Amilcar led on his armie. Before were the Elephants, the horse, and light armed followed next, the armed foote came last. And perceiuing the enemy, that followed his Reare, pressed hard vpon him, he commanded his whole armie to turne about. Those that were in the Vanguard of the march hee willed to returne to him with speede; the other that at first had the reare, hee wheeled about, and straight opposed against the enemy. The Libians and mercenaries imagining the Carthaginians fled for feare, fell vpon them disorderly, and boldly came to

to hands. But when they saw the Horsemen, being now turned about, and come vp neere to the foote, and already put in order, make a stand, they themselves, by reason they looked for nothing lesse, fell into a feare, turning their backs fled presently, as before they gaue on vnadvisedly, and tragically. And some of them falling vpon their owne people, that were coming on, wrought both theirs, and their owne destructions: other some were trampled vpon, and rode to death, by the horse, and Elephants, that followed the chafe. Thus saith Polybius. And thus saith of Wheelings. The figure, and words of command are referred for the 32 Chapter, where the manner of wheelings, and returning to the first posture is set downe.

Of sling, ranking, and restoring to the first posture.

CHAP. XXVII.

TO file is, when every particular man keeping equall distance from other standeth in his owne file lineally betwixt the file-Leader and bringer-vp. To rank is, to be in a right line euen with his sidemen in the length of the battaille. To restore to the first posture is, to bring the sight of the Souldier to the same aspect, he had before the first turning. As if his face were at first towards the enemy, being commanded to turne towards the Pike, and thence to returne to his first posture, hee is againe to returne his face toward the enemy.

Notes.

OF filing, and ranking enough is spoken before.
1 To restore to the first posture.] This motion differeth from Anastrophie before specified. For Anastrophie bringeth backe againe the whole body to the first place after aligning: This the Souldiers faces particularly to the first aspect. So that this is used after the making of an Anastrophie. For alwaies in motions it is requisite, that the Souldiers faces moue forward. To moue backward hath many inconueniences of stumbling vpon vnauen ground, or stones, or pittes, or stubbes, or such like. Which is the cause that in Anastrophie after a Wheeling, Aelian willeth, that the Souldiers turne their faces the contrarie way first, then moue on, till they haue recovered their first ground, then open ranks, and files, and lastly to restore to the first aspect. And as it differeth from Anastrophie so differeth it likewise from Metabole. Metabole only turned faces about, this setteth the Souldier in his former posture, not onely for his face, but for his armes, also, which are ordered as at first. The wordes wherein this motion is expressed by Aelian are Eporthon apodounai, and Eis orthon apocatastesai, which is interpreted by Gaza in arrectum reddere, to restore vpon right, by Arcerius rectum reddere, to restore right, and so the words sound. Aelian interpreteth it to set againe the Souldiers (sight) in the same aspect in which it stood at first: as if being placed with his face against the enemy he be commanded to turne his face to the Pike, and then againe to restore his face to his first posture, he must returne, and set his face against the enemy. Aelian therefore referreth it to the sight, be first had, which if it bee the right meaning, how can it

The Tactics

be upright, or right, more in that, then in any other posture. For the Souldier not onely in front, but in flanke, and in the reare carrieth himselfe upright, or right. I doubt not, but that it may be applyed to the upright standing of men, as appeareth by sundry places of Paulanias: Who reberseeth, that Mineruas image^a in the Temple Parthenion standeth upright, orthon eiti, and in another place, that in Corinth^b in the Temple Pantheon, there were two Images of Mercurie standing upright, Ortha, and that in the Temple of Fortune the image of Fortune was carned of Parian-stone, and stood upright; Orthon: and that in Neptunes Temple situate in the Corinthian Isthmus, the images of Amphitrite and Neptune stand in a Chariot, and the boy Palemon upright vpon a Dolphin, Orthos. In all which places Orthos designeth the site of men. But here, as I take, it cannot be so applied. Because in every motion, not onely in this, the men stand vpright. How then can they be referred to their standing upright, when they doe it already. I take the originall of the appellation to come from another cause, and that is from the ordering of the Pike. For when the battaile is first set in the field, every Souldier standes with his Pike ordered, that is vpright. For to order a pike is to set the butt end on the ground before the Souldier somewhat wide of his right foote, and to hold it upright with the right hand borne euen with the shoulder. But when you beginne, or continue any motion, the manner is to aduance, or to shoulder the Pike, and so to procede. But being commanded to returne to the first posture, it must be ordered againe. So that the first posture of an armed man is to stand with his pike vpright. And after many motions and windings, he at last returneth to the same posture, which I take to be the command of Ep'orthon apodounai to signifie. Now that I may not seeme to relye vpon a probable coniecture alone, I will bring witness for the confirmation of my opinion. It is reported by^d Diodorus Siculus, that Agesi-laus the Lacedemonian King with an armie of eighteen thousand foote, and fifteen hundred horse, invaded Boeotia. The Athenians before hearing of Agesi-laus comming had sent five thousand foote, and 200 horse to aide the Thebans, who gathering their armie together seized vpon a long narrow hill distant 20 furlongs from the City; And making the hard access to the place a kinde of fortification against the enemy, they there waited his comming, fearing to hazard vpon euen ground in regard of the renowne, and glory of Agesi-laus. Agesi-laus, hauing imbattailed his troups, led them against the Boeotians, and approaching neere, sent his light armed to sound their disposition to fight, which being easily repulsed by the Thebans by the aduantage of the higher ground, hee aduanced the rest of his forces being imbattailed in such manner, as might giue greatest terror. Chabrias the Athenian willed his Souldiers to waite the enemy contemptuously both keeping their list array, and their Targets at their knees, and continuing their Pikes upright ordered; who when they ioinly as vpon a word giuen, did as they were commanded, Agesi-laus both wondering at the good order, and at the assured fashion of the enemy thought it not fit to strue with vnequall ground, and by forcing them to fight, to compell them to be valiant, whether they would, or no. Hitherto Diodorus Siculus of the Stratagem of Chabrias against Agesi-laus, which consisted in the contempt of Agesi-laus, and all his forces: First in not stirring one foote, to meete the enemy, then in keeping the array they held before, further in sticking their Targets to their knees; Lastly in continuing the former order of their Pikes, that is not making ready to charge, but remaining with their Pikes ordered, as they were at first. Agesi-laus aduancing his armie thought to strike a feare into his enemies, Chabrias trusting to the strength of the place, scorned the Bruiado of Agesi-laus, conceiuing he would not be so hardy to aduventure the fight vpon so great an inequality of ground, he therefore willed the

souldiers

a Paulin in
Ateneis 43.
b Paulin in
Corinth 89.
c Paulan in
Corinth. 27.

d Diod. Sicul.
lib. 15. 473.

The Indian Civilization

The first after Conquest

The Conquest in action

The ground taken beyond the range of the Chalange

The Indian Conquest in Conquest

The Indian Conquest in Conquest

The first after Conquest

diers not to alter their posture, but to continue as they were. The words concerning the Pike are: En ortho to dorati mencein. That is to continue their pikes vpright (En ortho) Now whether the same be the posture, that the Tackicks describe, when they speake or restoring Ep' ortho, vpright, I referre to the iudgement of the Reader. * Polienus remembreth this Stratagem wth somewhat different words, and yet consenteth in meaning. Chabrias saith he, commanded his Souldiers not to runne out against the enemy, but quietly to stand still holding their pikes before vpright, and their Targets before their knees which they were wont to doe, when they would a little ease themselves of the weight of their Targets. Where Diodore, hath en ortho to dorati mencein, to continue their Pikes vpright. Polienus hath protinomenous ta dorata ortha, holding before them their Pikes vpright. But both haue pikes vpright, and Diodorus his Continue hath relation to the Posture they were in, which Chabrias would not haue them to alter: Polienus his hold before is that they were commanded to doe. In ordering of Pikes at this day I haue shewed, that the Souldiers hold them vpright, the but end set on the ground before, and somewhat wide of their right foot. * Æmilius Probus reciteth this historie peruersteth the Stratagem: He saith that Chabrias forbad the Phalange to giue backe, and taught his Souldiers to receiue the enemies charge kneeling with one knee, the other set against the Target, and with the Pike abased. Wherein hee quite dissenteth from Diodore, and Polien. Diodore saith, the command was to keepe their array; Polienus not to runne forward, but quietly to stand still; Probus not to giue backe. Probus saith, they should kneele with one knee, and rest against the Target with the other; Diodore that they should hold their Targets sunke to their knees; Polienus that they should carry their Targets before at their knees. Probus that they should abase, and charge their Pikes; Diodore that they should continue, and order them vpright; Polien that they should hold their Pikes vpright. So that Diodore and Polien agree, and expound one another: Æmilius Probus bringing in a new historie dissenteth, as I said, from the other two; especially in making that to be a forme of fight prescribed by Chabrias (a forme for to receiue the charge upon their knees) which was a contempt, to shew how little, especially in that strength of ground, he regarded Agelilaus; which contempts also made Agelilaus retire, not doubting but it proceeded from a great assurance of the enemy. Therefore as I said I take these words ep' orthon apodounai, not only to appertaine to the aspect of the Souldier, but also (and that much rather) to the erection, and ordering of Pikes.

b Æmil. Probus
in Chabrias.
127.

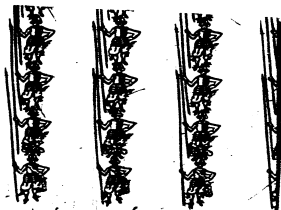
Of Countermarches, and the diuers kindes thereof, with the manner how they are to be made.

CHAP. XXVIII.

There are two sorts of Countermarches, one by file, the other by ranke; each of these againe is diuided into three kindes. The first called the Macedonian: The second the Lacedæmonian: The third the Choraan, which is also the Persian, and the Cretan. The Macedonian is that, which leauing the ground, it first had, taketh in liew thereof the ground, which was before the front of the Phalange, and turneth the aspect of the Souldier backward [where before it was forward.]

L 3

a The



The Front before Countermarch

2 The *Lacedemonian* is that, which leaving likewise the ground it first had, taketh in steed thereof, the ground which was behinde the Reare of the *Phalange*, and turneth also the face of the Souldier the contrary way.

3 The *Persian* is the *Cretan*, and *Chorasan*: This keepeth the same ground of the *Phalange*, euery souldier taking another place for that, he had, the file-Leader the place of Bringer-up, and to the rest in order; and turneth also the face of the Souldier the contrary way.

4 *Counter-marches* by ranke are made, when a man would transerre the winges into the place of the Sections; and the Sections into the place of the wings, to the end to strengthen the middelt of the battaile. Likewise the right hand parts into the left hand parts, and the leift hand parts into the right hand parts. They that feare to counter-march the *Phalange* in grosse the enemy being at hand, doe it by *Syntagmae*.

I will now set downe, in what manner counter-marches ought to be made.

The *Macedonian counter-march* by file is said to be, when the file-leader turneth about his face, and all the rest with the Bringer-up go against him on the right, or left hand, and passing on to the ground before the front of the *Phalange* place themselves in order one after another, according as the file-Leader himselfe hath turned his face. Therefore it maketh shew to the enemy appearing in the Reare, of running away: Or it is when the file-Leader turneth about his face, and the rest passing by him on the right or left hand place themselves orderly one behinde another.

But the *Lacedemonian* is, when the Bringer-up turneth his face about, and all the rest turning also their faces, and proceeding forward together with their file-Leader order themselves proportionably in the ground, which was behinde the Reare of the *Phalange*. Wherefore to the enemy appearing behinde, it makes a semblance of falling on. Againe the *Lacedemonian* is, when the file-Leader turning his face about to the Pike, or Target transferreth the whole file to another place equall to the first; and the rest following stand, as before, behinde him. Or else, when the Bringer-up turneth his face about, and hee, that stood next before him, passing by on the right or left hand, is placed againe next before him, and the rest following are placed one before another in their former order till the file-Leader be the first.

The *Chorasan* is, when the file-Leader turning about toward the Pike, or Target, precedeth the file, and the rest follow, till the file-Leader haue the place of the Bringer-up, and the Bringer-up the place of the file-Leader. And these are the Counter-marches by file.

In the same manner are *Counter-marches* made by ranke in case a man would counter-march by ranke. For euery ranke Counter-marching either keepeth the same ground, or changeth the right hand place, or the leift hand place, of the battaile, one of which muft needs fall out, and neuer faileth.

Notes.

The two former motions are performed, one in close Order, the other in all Orders; Epitrope when the battaile is thus so close, that (as *Ælian* saith) a man can turne his face neither the one way, nor the other. Clitus in open Order, Order, and close Order. See Leo cap. 7. The two following motions, Counter-march, and Doubling, one is done in open Order, the other for the most part in open order too; and yet sometimes in Order, and close

close order; as we shall see in due place. This Chapter handleth Counter-marches, the next Doublings. Counter-march is a motion, whereby euery souldier marching after other, changeth his front for the reare, or one flank for the other. For there are two kinds of Counter-marches, one by file, and the other by ranke. And each of these is againe diuided into three; the first is called the *Macedonian*; the second, the *Lacedemonian*; the third the *Chorasan*, or *Cretan*. A Counter-march by file is, when euery souldier followeth his Leader of the same file; By ranke, when euery souldier followeth his sideman of the same ranke in the Counter-march.

1 The *Macedonian Counter-march* [in this Counter-march, the purpose of the Commander is to turne the front of his battaile against the enemy that sheweth himselfe in the Reare; and withall to take the ground that lyeth before the front of the *Phalange*. It is called the *Macedonian Counter-march* (saith *Ælian*) because the *Macedonians* were the inventors of it. Which of the *Macedonians* he telleth not, but includeth Philip, and Alexander, who both vsed the *Lacedemonian Counter-march*. And before their times I haue not read of any warlike Kings of Macedonia. The manner of it is this: First all the File-leaders turne their faces about either to the right or left hand; then the next ranke passeth thorough by them on the same hand; and being come to their distances, place themselves directly behind their File-leaders, and then turne about their faces the same way. And so the third ranke after them, and the fourth, and all the rest, till the Bringers-up be last, and haue taken the reare of the battaile againe, and turned about their faces. The figure expresseth not well the action. For in it the Bringers-up begin first to counter-march, which according to *Ælian* should moue last. Yet may this Counter-march be done, as the figure is. But I take *Ælians* way to be easier, and readier. And it may be also, that the Counter-march expressed in the figure is left in the text. For one of the *Lacedemonian Counter-marches*, which precedeth the contrary way, beginneth the motion with the File-leaders, as this doeth with the Bringers-up, as wec shall straight see.

2 The *Lacedemonian counter-march* [In this Counter-march the proceeding is contrary to that of the former; that took the ground before the *Phalange*, this takes the ground after. In that the mouing was from the Reare to the front, in this from the front to the reare. This is the invention of the *Lacedemonians*. *Ælian* describeth it to be done in two manners: One, when the Bringers-up first turne about their faces, and the next ranke likewise turning faces beginneth the Counter-march, and euery man thereof placeth himselfe directly before his Bringer-up, and the third doe the like; and so the rest, till the ranke of the File-leaders come to be first: The other, when the File-leaders begin the Counter-march, and euery one in their files follow them orderly. The figure expresseth this in it the souldiers seeme to fall on, and got to the charge, where in the *Macedonian* they seeme to flye. There are notwithstanding times, when it is better to use the *Macedonian*. As in case you meane to march on, and not to fight with the enemy, except you be compelled: Or else you seeke to gaine some ground of advantage. For the *Macedonian* continueth still the march, and stayeth not; the *Lacedemonian* returneth vpon the enemy, and so loseth ground in marching. Agelilaus after victorie gotten against the Argives, chomenians in the left winge, hearing that the Thebans had beaten the Orchomenians, used the *Lacedemonian Counter-march* against them. The words of Xenophon sound thus: Here the strangers were about to crowne Agelilaus (thinking he had got the victory) when newes was brought that the Thebans, after they had broken the Orchomenians, had forced a passage as farre as the baggage. Then Agelilaus, counter-marching his *Phalange*, led against them.

The

The Thebans perceiving their Confederates were fled vp to the mount Helicon, closed their troupes together, as neare as they could, seeking to open a way by force, and to get vp vnto them. Agefilus albeit he might by giuing way to the formost haue followed them as heeles, and charged the reare, yet did he it not, but met the Thebans front to front. Thus encountering, and clashing their Targets together they fought, thrust on, killed, and were killed. In fine some of the Thebans broke thorough to Helicon; other some, as they sought to escape, were left dead on the place.

Agefilus here followed the chase vpon the Argives toward the mount Helicon: The Thebans vpon the Orchomenians the contrary way towards the enemies Campe. The Thebans seeing their confederates fled to the mount Helicon, returned toward them, Agefilus counter-marched to meete them, met them, and fought with them. For the Counter-march he used, I make account it was the Lacedemonian, himself being a Lacedemonian.

Xenoph. hist. grec. lib. 6. cap. D.

And he used it to meet the Thebans by a way in front. The same Agefilus, after he had by night incamped in a peece of ground behind Mantinea incamped about with mountaines, perceiving the next morning, that the Mantinians gathered together vpon the toppes, that lay right over the head of his Reare-gard, determined to lead his Armie out of the place with all speed. Now if himselfe should lead, he feared the enemy would giue vpon his Reare. Therefore standing still, and turning his armes against the enemy, he commanded the last of the Phalange to march backe againe from the Reare, and come vp to him; and so at once he brought his Armie out of the straights, and made it by little, and little stronger. When the Phalange was thus doubled, he proceeded in that order into the Champeigne, & there againe reduced the depth of the armed foote to 9 or 10 men in euery file. This place of Xenophon, if it be not corrupted, is very obscure. And I cannot tell whether to take it for doubling of the front, or the Macedonian counter-march. The words make for a doubling. For Xenophon saith plainly, the Phalange was doubled. Besides he addeth, it was made by little and little stronger, which could not be done with a Counter-march. And that a deepe Phalange, or Hearse, (such as this by the euening march, and the straights it entered, seemeth to be) is made stronger by doubling the front, there is no question. On the other side, the straights, through which it was to passe, perfwade me, it should be a Macedonian Counter-march. For in doubling the front the length still increaseth; & the manner is not to enlarge, but to extenuate the front, when an Armie is to be conveyed thorough a narrow place. And Xenophon saith expressly, that Agefilus led it thorough the straights into the Champeigne in that order, so which it was reduced last; & that in the Champion the depth of the Armed was lessened, and brought to 9 or 10; for there Agefilus imbattailed his Phalange to receive the enemy, if he would charge. And in a march through straight waies the front is commonly narrowed, and proportioned to the way; but in open ground the Phalange is againe brought to the iust length. So that it seemeth the depth was much, before it came into the plaine; because in the plaine it was brought to 9 or 10 men, and therefore no doubling. Lastly Agefilus, (and the front I doubt not of the Phalange with him) turned face to the enemy, before the Reare came vp to him, which is done in no other motion than the Macedonian counter-march. In which all the File-leaders first turne about their faces toward the enemy, and then the whole battaille marcheth against the File-leaders, and placing themselves orderly behind them, turne their faces the same way, that they haue done before. Now where it is in Xenophon, that Agefilus having gained the Champeigne, extended his Armie to 9 or 10 Targeteers, I suspect a fault to be in the number of 9; and that it ought to be read 8 or 10. To extend a Phalange is to draw it out in length; so the length is the space betwixt the point of both wings. When he saith he extended it,

10,

10, the meaning is he drew it out so farre in length that he left but 10 in depth. Ten is the decas, whereof I spoke before, and I haue likewise noted, that the Lacedemonians for the most part, made the depth of their battile 8. The number of 9, as all other wriuen numbers, was rejected by the Tactics, as vnfit for doublings. So that mine opinion is that Xenophon at the first wrote 8 or 10, not 9 or 10, howsoeuer 9 be crept into the place of 8. But to returne to Agefilus, aduise used doubling of ranks, or of the front in retiring out of the Mantingan straights, yet giue me leave to be of opinion, that the Macedonian Counter-march had beene the fittest motion for that purpose. For himselfe being thereby cast in the reare, he had both prevented the charge of the enemies (which he feared) and yet wounded better out of the straights, the long Herle, which still remained in the Macedonian Counter-march, being more proportionable to issue out of a narrow place, then a broad-fronted Phalange, which ariseth out of doubling the front.

3. The Persian is the Cretan or Choræan] This Counter-march is called the Persian, and Cretan, because it was used amongst the Persians and Cretans. And it was termed the Choræan also, of the similitude it had with the soleme Græcian dances vpon stages; the company, that shewed themselves in such dances being called Chorus. When their dances ordered themselves into files, and ranks, as souldiers doe in battaile, and moving forward to the brinke of the stage, when being straightened by the place, they could passe no further, they retired one through the ranks of the other, exceeding not the bound of the place, as is done in this Counter-march. The other two kinds of Counter-march changed the ground, they had before. The Macedonian took the ground before the front; The Lacedemonian the ground after the reare. The Choræan holdeth the same ground, & beginneth the motion with the File-leaders, who notwithstanding precede no further, then thither, where the Bringers-up stood, their files following them, & euery souldier keeping the same distance, he had before the moving. The figure becometh the manner of it. These Counter-marches by file are to be made, when the enemy appears in the reare, and cometh to charge vs. And they are made to the end, to bring our best men, that is the File-leaders, to the encounter. Wherein notwithstanding there is a caution to be held, that if the enemy be very neare, or so neare, that we cannot conveniently counter-march, before he come vp to vs, we forbear, lest we fall into disorder, and in disorder be easily defeated. In which case the best remedy is to turne faces about, and so receive him. This sort of Counter-marches by file.

4. Counter-marches by ranke are made] The ends of Counter-marches by ranke are two in Aelian: one to strengthen the middle of the battaile; the other to strengthen the wings. If the strength of the enemies battaile, be most in the middle, reason of Warre would, that we should oppose our greatest strength against the middle. If in the wings against the wings. There is an other cause of strengthening the wings; namely if the enemy be ready to charge either of them: and this strength Aelian would haue giuen by the Counter-march of our best men into the wings. It shall not be from the purpose to make all plaine by an example or two. Herodotus reporteth, that before the battaile of Platæa betwixt the Græcians, and the Persians, it was agreed betwixt the Athenians, and Lacedemonians, that where the Athenians had vanquished the Persians in the battaile of Marathon, and had lately slain Masius the Generall of the Persian horse; and by those encounters had good experience of the Persian manner of fight; and where the Lacedemonians were imbattailed in the right wing against the Persians, the Athenians in the left wing against the Thebans, and other Græcians, that took part with the Persians; they should charge, and the Athenians haue the right wing, the Lacedemonians the left.

These

Herodotus
Calliope 248.
& Plutar. hist. in
Artide.

These newes were caried to *Mardonius* the Generall of the Persians; who whether fearing the Athenians, or desirous to fight with the Lacedemonians, changed his place from the left into his right wing, to the intent to oppole against them; which when *Pausanias* saw, he returned to his right wing, and *Mardonius* to his left, the place, which he had at the beginning. *Here are changing wings on both parts; The one counteing to fight in the left wing, the other desirous to fight in the right. The Countermarch by ranke from the right wing would have suited Pausanias; as the contrary Countermarch would have suited Mardonius. Yet am I led to thinke that Pausanias used a wheeling of his battaile, and so conveyed it from one wing to another behind the battaile of the other Grecians, to the end, that being shadowed by them, hee might the better hide his purpose from Mardonius. Another example I finde in Livy and Polybius both. It is this: Pub: Scipio, who was afterward called Africanus, and Asdruball the sonne of Gisgo, being incamped neare together in Spaine brought daily out of their Campes their Armies one against another. And after they had long stood waiting, who should begin the fight, which was done at neither hand, they conveyed them backe againe. The manner of their imbatrailing was this. The Romans, and likewise the Carthagineans mingled with the Africans, had the middle, their Confederates the wings. The opinion was they should fight in that order. Scipio when he perceived this to be firmly beleued, the day before he ment to fight, made an alteration of all. When night came, he gaue the word thorough the whole Campe, that horse and men should dine, before it was light day, and that the horsemen in Armes should keepe their horses bridled, and saddled. The day was scarce sprunge, when he sent his horse, and light-armed to beat in the Carthaginean Gardes, himselfe streight followed with the armed Legions; disposing the Romans (contrary to the settled opinion of his owne people, and of the enemy) in the wings, and receiuing the Allies into the midst. Asdrubal raised out of his bed with the cry of his horsemen, had no sooner leaped out of his Tent, and seeing the tumult before the trench of his Campe, and the amazement of his people, and the Ensignes of the Legions shining a farre off, and the field full of enemies, presently sent out his whole power of horse to undertake the Roman horse. Himselfe issued out of the Campe with his foote, not changing any thing of his wonted manner of imbatrailing. The fight of the horsemen had now a long time bene doubtfull, and could not bee tried, because still, as they were beaten (which hapned a like to both) they found a safe retreat within the battailes of foote. But when the Armies were come within 500 paces one of another, Scipio giuing a signall of Retreat, and opening his battaile, receiued all the horse, and light-armed into the midst, and diuiding them into two parts, placed them as seconds, behind the wings. Now when time was come to begin the fight, he commanded the Spaniards, who had the middle ward, to march on leasurely, and sent a messenger from the right wing (for hee commanded there) to *Syllanus* and *Martius*, willing them to stretch out the left wing, as they saw him stretch out the right; and to charge the enemy with the light-armed, and horse, before the middle wards might be able to come vp, and ioyn. The wings being thus stretched out, they led with all possible speed three Cohorts of foote, and three troupes of horse a peece, against the enemy, besides the light-armed, and those that were receiued into the Reare, who followed a thwart. There was a great empty space in the midst, because the Ensignes of the Spaniards came slowly on. And now the wings were in fight, when the old souldiers Carthaginians and Africans, the strength of the Armie, were*

no:

not yet come to vse their darts, neither durst they runne into the wings to helpe them, that fought for feare of opening the midst of the battaile to the enemy, who was comming on against them. The wings were pressed with a double mulley. The Horse, light-armed, & Velites, wheeling about their Troupes, charge their flanks. The Cohorts pushed on in front, to the end, to breake of the wings from the body of the battaile. And the conflict was vnequall both in all other respects, and especially because a rable, as it were of drudges, and vntrained Spaniards, were opposed against the Roman and Latin souldiers. The day being now farre spent, the Armie of Asdruball oppressed with the mornings tumult, and compelled to take the field, before they had strengthened their bodies with meat, began to faint, and faile in strength; which was the reason that Scipio lingered out the day, & made the fight somewhat late. For it was past the seuenth houre, before the wings of foote attached one another; and yet the fight came later to the middle wards. So that the scorching heat of the *south-sunne*, and the labour of standing armed, and hunger, and thirst, first afflicted their bodies, before they came to hands with the enemy. Therefore they stood leaning vpon their Targets, and being weary both in body, and minde, they gaue backe at last; keeping notwithstanding their array no otherwise, than as if the battaile being yet entire, had retreated at the commandement of the Generall. But when the victors, perceiving them to shrink, so much the more eagerly pressed on, the brunt could hardly be indured any longer. And although Asdrubal refrained, and stopped them, that gaue ground, crying that bill, and a safe place of retreat was at their backs, if they could be but intreated, to retire easily; yet feare ouercomming thime, and the enemy killing them that were next to hand, they forthwith turned their backs, and vniuersally powred out themselves into flight. This stratagem of Scipio resteth principally in shifting his beitt men (the Romans) into the wings; the Spaniards his worst into the midst, and in keeping the Spaniards aloofe from ioyning; and in hasting to try the day with the Romans against the weakest of the enemy. Asdrubals way to meete with this stratagem had bene to counter-march by ranke halfe his Carthaginians, and Africans into one wing, and halfe into the other. And by that means his Spaniards should haue had the midst against the Roman Spaniards, and his old souldiers Carthaginians and Africans bene opposed in the wings against the Romans, and Latins, and the advantage eluded, that Scipio sought.

As the Countermarches by file were of three kindes, so are the Countermarches by ranks; namely the Macedonian, the Lacedemonian, and the Chorean. The Macedonian beginneth to moue at the corner of the wing, which is nearest to the enemy, the enemy appearing to either flanks. And therefore inturmeth the same impatience, that was laid vpon the Macedonian countermarch by file; as seeming to runne away, because it diuermeth from the enemy. Yet is there vse of it, as well as of that by file. For by this countermarch you may set the strongest part of your Armie against the enemy, and apply the weakest to some River, Lake, hill, or such like, so that the enemy can not come to incompass it. It taketh the ground that lieth on the side of the contrary wing. The Lacedemonian taketh the ground that lieth on the side of that wing, which is toward the enemy, and bringeth the best men to be foremost against the enemy: And therefore beginneth the moving on the contrary side. The vse of it is, when your forces are such as are able to encounter the enemy, and you desire to bring your best men to fight. The Chorean keepeth the same ground, the battaile had at first, & bringeth one wing to possess the place of the other; Or else the Sections to possess the place of the wings, as might bene

The Tactics

beene done in the last example cited concerning Scipio and Asdrubal. The manner of countermarch by ranke is contrary to the countermarch by file. In countermarch by file the motion was in the depth of the battaile, and either the front removed toward the reare, or the reare toward the front, and tooke one another's place. In this the motion is in length of the battaile flanke-wise; the wing either marching into the midst, or else cleane thorow to the other wing. In doing it the souldiers that stand uttermost in the flanke of the wing, must move first to the contrary wing, and the rest of every ranke successively follow them in order. The figure will shew the manner of the motion. Patritius utterly mistaketh the countermarch by ranke, and groundeth himselfe upon a wrong principle, namely that in all Countermarches the File-leaders must march toward the reare, and the Bringers-up towards the front. And therefore in changing the winges into Sections, he makes the winges to fall off behind in the reare (the File-leaders wheeling about) and there to ioyne themselves as neare, as the middle Section will give leame, and the Sections falling backe likewise, to ioyne themselves to the flanks of them, that were the winges. Whereas the nature of this Evolution is clearly to leane the File-leaders in front, and Bringers-up in reare, as they were at first. And albeit the File-leaders then change their places, yet change they their place with none, but with File leaders, and the change is, but a change of hands, the right hand for the left, or the left hand for the right. For whereas the File-leaders of the right wing had before the right hand, now in countermarch by ranke, being transposed to the left wing, they have the left hand of all the rest of the File-leaders; as likewise the Bringers-up of the other Bringers-up.

The words of Command may be these,

For the Macedonian Countermarch by file.

File-leaders turne your faces about (to the right or left hand).

The rest of every File passe thorow in order one after another, and place your selves at your distances after your Leaders, turning your faces about; and so stand.

For the Lacedemonian Countermarch by file.

The first manner.

Bringers-up, turne your faces about (to the right or left hand.)

The rest turne your faces about and beginning at them, that are next to the Bringers-up, countermarch and place your selves in your distances before the Bringers-up, and one before another till the File-leaders be first.

The second manner.

File-leaders, countermarch to the right, or left hand, and let every mans file follow him, and keepe true distance.

For the Chorgan countermarch by file.

File-leaders, countermarch to the place of the Bringers-up, and stand, and let your files follow you keeping their distance.

For the Macedonian countermarch by ranke.

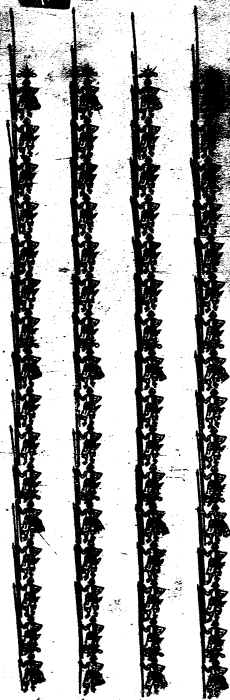
The right or left hand corner file, turne your faces to the right, or left hand.

The rest of each ranke, passe thorough to the right, or left hand; and place your selves orderly behind your side-men keeping your distance.

For

Cap 29
Dobling of Ranks

Dobling of ranks in action



The form before Dobling of ranks



The form after Dobling of Ranks

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2nd hand)

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Notes

July 29
 Doubting J. O'Connell
 or John

July 30
 1844

For the Larches

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For the Chorus

of Dublin

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 same ground) of 2, 48 like by the
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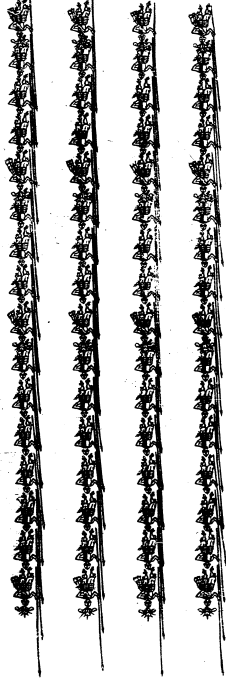
4 There are, that make the
 and would have a flow of battle,
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 the wings of the battle. The fly
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Passage of the Daphn by Camo
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July 31st
 1844

The first before Dabbling of water

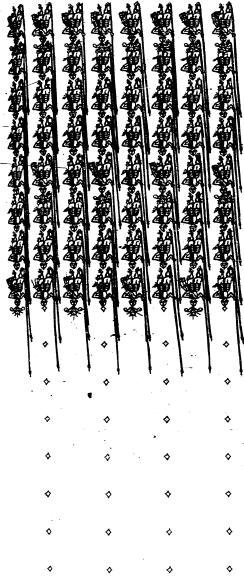


Dabbling of water, in action

Dabbling of water

Copy 29

The first after Dabbling of water



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City 29
Doubling y^e Depth
or files

The depth doubled by Countermarch



The front after Doubling of Ranks

of Ælian.

For the Lacedemonian countermarch by ranke.

The first manner.

The corner file, where the enemy appeareth, turne your faces to the right or left hand;
The rest of ech ranke turne your faces, and passe thorough, (to the right or left hand)
and place your selves before your side-men orderly keeping your distances.

The second manner.

The right or left wing, where the enemy appeareth not, countermarch to the contrary wing,
and all in the Ranks follow every man his side man; keeping your distance.

For the Choraean countermarch by ranke.

The uttermost corner file of the right, or left wing, countermarch into the place of the
left or right wing, and stand.
And the rest follow ranke-wise keeping their distance.

Of doubling, and the kindes thereof.

CHAP. XXIX.

¹ There are two kinds of doubling, one of *Ranks*, the other of *Depth*, or *files*: and ² either of these double the number, or the place. ³ The length is doubled in number when of a front of 124 files we make a front (keeping the same ground) of 248 files, by inserting in the spaces betwixt file and file, some of the followers, that stood in the depth. This is done to the end to thicken the length of the battaile. If we list to recall them to their first *posture*, we are to command those, that were inserted, to *countermarch* to the place, they had before.

⁴ There are, that mislike these *doublings*, especially the enemy being at hand; and would have a shew of doubling made, without indeed doubling the *Phalange* already ordered, by stretching out the *light-armed*, and the *horse*, on both sides of the *wings* of the *Battaile*. ⁵ The use of doubling the length is, when either we would *over-wing* the enemy, or else our selves feare to be *over-winged*.

The *Depth* is doubled ⁶ by inserting the second file into the first; so that the *Leader* of the second file be placed next behind the *Leader* of the first file, and the second man of the second file be the fourth man of the first file, and the third man of the second file be the sixth in the first file, and so forth the rest, till the whole second file be ingrossed into the first; and likewise the fourth file into the third, and all the even files into the odde.

Doubling of the *Depth* by *Countermarch* is made, either when the next *side-files* in severall [as in the former example the second, and the fourth, and the rest of the even files] *countermarch* to the *Rear*, and place themselves behind the *Bringers-up* of the *odde* files; or else the files remainyng in their first place, and number, halfe of them, diuiding themselves from the other halfe, *countermarch* likewise to the *Rear*, and conveying themselves behind the other, there order themselves, and so double the depth of the *Phalange*.

If we would returne them to the first *posture*, we must recall those, that were conveyed to stand behind, to the place they had before the *Countermarch*.

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Notes

THE former three Motions alter not the forme of the Phalange. For whether you turned faces, wheeled, or counter-marched the Phalange, the depth and length remained one. The motion to be expressed in this Chapter induceth an other shape to the Phalange; and maketh it seeme a different body from that it was before, being by Doubling extended either in length or in depth. For Doubling the number of men, or the place of the Phalange in front, maketh the length twice as much, and doubling the same in flanke maketh the depth double to that it was before. For Doubling is nothing else, than making a military body twice as long, or twice as deepe, as it was before.

1. There are two kindes of doubling [The Doublings are either of length or depth; Or (which is all one as ⁿ Suidas saith) of ranks or files. For ranks stretch out in length, files in depth. And these againe are divided into two other kindes, the body being

2. Doubled in number or place] That which is here called number, is called otherwise persons; or ⁿ (by Suidas) men. It is called persons in the Insertion which is made to *Elían*, I know not by whom, in the precedent Chapter of Countermarches. Which because it lay thrust in betwixt the description of Countermarches, and nothing pertained to that argument, I neuer made doubt, was crept into the text. And I am rather confirm'd in my opinion, because I saw it noted with an Asteriske in that *Elían* (being of Robortellus Edition) which the learned Isaac Casaubon had quoted, and purposed to set forth, if untimely death had not prevented him. I will here set downe the words, because they differ not much from *Elían*, and may giue some light to the manner of Doubling. It is to be vnderstood (so are the words) that a Phalange is doubled in persons, or place, when we therefore take halfe the souldiers from the Depth, and making files of them, place them euen with the rest in length of the front, so that of 124 files we make 248, this is Doubling of persons. In like sort we double the place with 124 files (not increasing the number) but onely commanding some to turne to the Pike, some to the Target, till the Phalange be stretched out to a convenient length; as from 5 furlongs to 10. In the same manner is the depth doubled. For either one file is inserted into an other, man for man, so that the second File-leader becomes the follower of the first, and the second man in the second file, the follower of the second in the first file, and so the rest: Or else 16 men are so extended, that they hold as much ground in length, as 32 usually doe. So farre the insertion. It followeth in *Elían*.

3. The length is doubled in number] When the front hath twice as many files, as it had before, this is Doubling in number, or in men, or in persons. For the persons, or men, make the number in the files. And the files carrying an euen depth of men, and being doubled, double the number of the front, or length. *Elían* speaketh but of one kinde of doubling, namely of number, and that must be done in open order, as I said before. For the files of 16 standing in open order if you command the Middlemen (as we terme them at this day, they were called in the Macedonian files the third Enomotarchs) to double their ranks: These middlemen with the hinder halfe file march vp to the front, & so doubling the front in number leaue yet the same measure of length. The figure sheweth how it is done. Yet are there two other waies, when the Phalange standeth in close order, both which double the number and place. One is when the Middlemen diuide themselves, and one halfe with their followers turning their faces march out of the right flanke: The other of the left flanke of the Phalange. And then turning their faces againe,

flieue

flieue up and ioynne themselves in an euen line with the File-leaders in front; The other when all the Middle turne their faces one way and march out with the followers beyond one flanke right or left; and turning faces againe flieue up to the front, and stand euen with the File-leaders. One of these is done, when we desire to enlarge both the wings of the Phalange; the other, when but one wing. Of these two last waies, I haue set downe no figure, because I finde them not expressed in *Elían*. Cleandridas the Lacedemonian, used yet an other kinde not spoken of by *Elían*. ⁿ Polienus telleth the story thus: ⁿ Polienus lib. 2. in Cleandridas. 8. 4. Cleandridas making warre upon the Thourians, hauing halfe as many men againe, as they, conceiuing if they had intelligence hereof, they would hardly bee brought to fight, imbrattailing his Phalange, stretched it out in depth. The Lucians therefore, contemning the small number, drew out their forces in length, with intent to ouer-front the enemy; which Cleandridas perceiving, commanded the followers to march up and ranke with their Leaders; and by that meanes increased the length of his Phalange, and ouer-fronted the enemy, who being incompassed, and assailed with misliue weapons on all hands perished intirely, excepting a few, that saued themselves by shamefull flight. The words seeme obscure to a man not acquainted with the Tactics. There are two kinde of soldiers saith *Elían* in a file, Leaders, and followers. All the Leaders are the odde of the file; as the 1st, 3rd, 5th, 7th, and so forth: the followers are the euen, as the 2nd, 4th, 6th, 8th. Those that are in the same ranke, are called side-men. Now, saith Polien, Cleandridas willed the followers to step forward, and to ranke, and become side-men with their Leaders: that is, he willed the euen files to double their ranks with the odde; and so extenuated the depth, but increased the length of his Phalange; by which art he ouer-fronted, & inclosed the enemy on all sides. This way then to double ranks, or the length of the battaile, is to insert the euen ranks man by man into the odde. All the Doublings that haue beene rehearsed, were Doublings either in number alone, or else both in number, and place. For doubling of place alone nothing is said in *Elían*. The Insertion I recited, supplyeth this defect: saying, the place is doubled with 124 files, onely by commanding halfe to turne to the Pike, halfe to the Target, till the Phalange be stretched to a convenient length; as from 5 furlongs to ten; which is as much to say in few words, as to open the Phalange; Or to bring it from order, to open order. For so the front possesseth double ground, so that it had before.

4. The vse of Doubling the length is] Two causes are assigned for the doubling of the length: 1. One to ouerwing the enemy, the other to auoide ouerwing our selves. Cleandridas in the example aboue, performed both: For he both disappointed the Lucians that sought to incompass him, and besides incompassed, and inclosed them. The narrower the front is, it is the more in danger of ouer-fronting; being p. Xenoph. Cy. drawne out in length it is freeer from enclosing, because a greater compass must be fetched, before it can be inclosed. Yet are we to take heede, that in doubling of the front, we giue it not so much length that it faile in depth. The want of length, or depth is alike dangerous, and giueth aduantage to the enemy. I haue touched before, and quoted Leo gleaning onely at his words. Now I will set them downe as they lie: 4 When the thickness of the Phalange (saith he) is gathered vp and made more thinn, it is behooueth not so to lengthen it, that it become altogether weak and without depth. For it will so come to passe, that the enemy shall easily cut it in peeces, and make a passage thorough it, and not onely seeke to incompass it before, but passing thorough the middelt, bee found behinde, and there indamage it. And this it behooueth a Generall, not onely to take heede, hee suffer not himselfe, but also indeuour to put vpon his enemy.

M 2

Hitherto

i Leo cap. 7.
69.k Polyb. lib. 4.
in Antiquo.
5. 19.

Hitherto are the words of Leo: showing the disadvantage of a battaile too much thinned by doubling the length. But ¹ Leo elsewhere addeth an other cause of doubling, namely to make shew a faire sight of the Armie. For the more ground it taketh in front, the more will the number appeare, and the braverie of every man in particular discovered. Further Antigonus used also this doubling for a policie to beguile his enemy. ² Polien reporteth the fact thus: Antigonus incamped against Eumenes with an armie inferior in number. And when messengers were sent often from one to another, Antigonus at the receipt of a messenger of the enemy, commanded one of his souldiers to come running in, as it were out of breath, and all to be fulfilled with dust, and to bring newes that his Confederates were come. Antigonus hearing the newes, leaped for ioy, and sent away the messenger. The next day he led his Armie out of his trench, doubling the length of his front. When the enemy heard of their messenger the newes, that was brought to Antigonus concerning his Confederates, and saw the length of his battaile doubled, they imagined that the depth was answerable to the front. And therefore they dislodged being afraid to ioyne with him.

5 There are that mislike Counter-marches, and Elians doublings of number, are dangerous the enemy being ready to charge. Because the files of the Battaille must be kept in open Order till the motions be ended, which posture is not fit to receive the charge of the enemy, as we saw out of the eleventh Chapter. The other two doublings are done in close order, whereof I made mention a little before; The one dividing the middle men in halfe, and securing them up by the battaile on both sides; The other securing them upon one side which you will, may be used without danger, as well when the enemy is weare, as when the fight is: in as much, as they disturbe not the battaile, but advance fresh aides against the enemy on the flanks of it.

6 By inserting the second file] There are two manner of doublings of the depth or of files; one in number, the other in place. In number, when one file is inserted into another, the Leader or first man of the second file standing behind the Leader of the first; the second behind the second, the third behind the third, and so forth of the rest: Or when the even files counter-march, and their Leaders place themselves behind the Bringers-up of the odde, their files following them; or (which cometh all to one) the files being whole, they divide themselves into two parts in the front, and halfe counter-march, and place themselves in the Reare of the other file to file: albeit the two last are Doubles both in number and place, and not in place alone. The true Doubling of the place alone is not Elian. The Insertion whereof I spake, remedie this defect also. There it is said, that when 16 men (that is, as 2 files) are so extended, that they possesse as much length as 32 should doe, (that is, as 4 files) it is doubling of place, which is nothing else but changing of the Souldiers order into open order. For in their order they have 48 foote in depth; in their open order 96 foote in depth. In this Doubling of depth we must take heed that we make not the front of our Armie to narrow itselfe we give opportunity to the enemy to incircle, and compass it. Polybius noteth this a great fault in Marcus Atilius Regulus, at such time as he fought with the Carthaginians, and was taken prisoner. His words beare this effect: ³ The Romans seeing the enemy order his battaile marched out against him full of courage. Being notwithstanding somewhat appalled at, and foreseeing the Elephants violence in coming on, they set their Daners before, and placed many maniples of Armed behind, one after another, and divided the Horse halfe into one wing, halfe into the other. Then making the whole battaile shorter, but deeper, then they were wont, they provided well against the Elephants, but not against the Horse, that farre exceeded theirs in

l Polyb. lib. 4.

in number. Being now come to hands the Roman horse overpressed with multitude of the Carthaginians quickly fled from either wing. But the foote of the left wing, partly avoyding the Elephants, partly contemning the Mercenaries, fell on, and charged the right wing of the Carthaginians, and putting it to flight, followed hard, and gaue chase euen to the trench. But of those, that were placed against the Elephants, the first linking vnder the violence of the beasts, perished being overtaunted, and troden to death by heapes. The body of the battaile remained a while vnbroken by reason of the depth of them, that were after placed. But when the Reare of all, incompassed by the horse, was forced to turne about, and fight with them; and the other that had by force made way thorough the middle of the Elephants, and were now behind their backs, came vp to the fresh Phalange of the Carthaginians, standing in good order, they were by them slaine. Thus fortune being contrary on all sides, the Romans for the most part were troden to death by the excessive might of the beasts, and the rest died by the darts of the horsemen in the place, where they fought. The error of Atilius Regulus was in ordering his battaile too deep; by means whereof it was easily incompassed, and distressed by the Carthaginian horse. ⁴ Appian likewise blameth Antiochus for ordering his Phalange 32 men in depth, where the Macedonian Phalange ought to but 16 deepes, showing that by thus overfight it was incompassed by the Romans, and overthrowne. I have touched the historie in my notes before. Many other examples might be alledged, but these two are sufficient for our purpose.

m Appian in Syria 107. B.

The words of Command in doubling of the length by number.

Middle men double your Ranks to the right, or left hand.

By this Command the middle men with their halfe files march up to the front, in the spaces betwixt the files, and stand euen with the File-leaders, and the rest euen with the rest of the Ranks.

Doubling of the length in place.

Stand in your open order.

One halfe openeth their files to the right hand, the other to the left, and stand six foote one from another.

Doubling of the depth in number.

Double your files to the right or left hand.

The euen files fall into the spaces of the odde files.

Double your files by counter-march to the right or left hand.

The euen files counter-march, and fall behind the reare of the odde, and place themselves lineally after them, observing their first distances.

Divide your files and double them by counter-march to the right, or left hand.

Halfe the files divide themselves from the other halfe, and counter-march out behind the Reare, then turne their faces towards the place behind the Reare of the standing files, which remoued not; then march on, and place themselves orderly behind them file to file, then turne their faces, as at first.

Doubling the depth in place.

Ranks open behind to your open order.

The broad-fronted Phalange, the deep Phalange, or Herse, and the vneuen-fronted Phalange.

CHAP. XXX.

P *Lagiophalanx*, or the *broad-fronted Phalange*, is that, which hath the length much exceeding the depth.

Orthiophalanx, or the *deep Phalange* (commonly called the *Herse*) is that, which proceedeth by *wing* having the depth much exceeding the length. In generall speech every thing is called *Paramakes*, which hath length more then the depth; and that which hath the depth more, then the length, *Orthion*: and so likewise a *Phalange*.

The *Phalange Laxe*, or vneuen fronted, is that, which putteth forth one of the *wings* (which is thought fittest) toward the enemy, and with it beginning the *fight*, holdeth off the other in a convenient distance, till oportunitie bee to advance

Of Parembolè, Protaxis, Epitaxis, Proflaxis, Eutaxis, & Hypotaxis.

CHAP. XXXI.

P *Parembolè*, or *infection* is, when placing souldiers before we take off the hindmost, and ranke them within the distances of the first.

Protaxis, or *fore-fronting*, is when we place the *light-armed* before the *front* of the *armed*, and make them *fore-standers*, as the *File-leaders* are.

When we place the light-armed behind, it is called *Epitaxis*, as it were an *after-placing*.

Proflaxis or *adiorning* is, when to both flanks of the battaile, or to one flanke, some part of the hindmost is added, the front of them, that are added, lying euen with the front of the battaile; such addition is called *Proflaxis*.

Eutaxis, or *Infection*, is when it seemeth good to set the light-armed within the spaces of the files of the *Phalange* man to man.

Hypotaxis, or *Double-winging*, is when you bestow the light-armed vnder the wings of the *Phalange*, placing them in an embowed forme; so that the whole figure resembleth a three-fold gate, or doore.

How the motions of wheeling, double, and treble wheeling of the battaile are to be made.

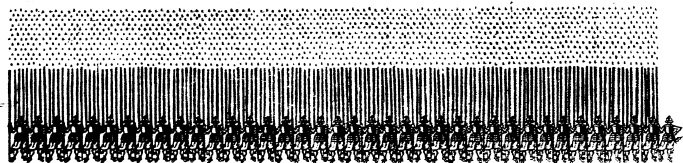
CHAP. XXXII.

IT followeth to shew how a battaile may be turned or wheeled, and how after reduced to the first posture, or Station.

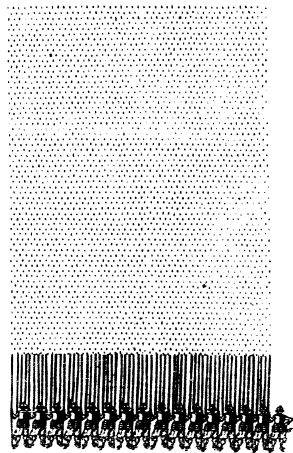
When therefore wee would accustome our Troupes to wheele the battaile to the

Plagiophalanx or the Brode-Fronted
Phalange

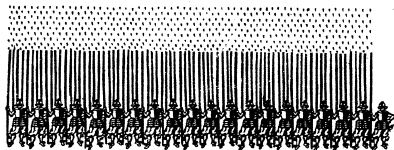
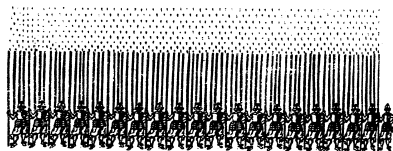
Fig. 3



Orthiophalanx or the Horse

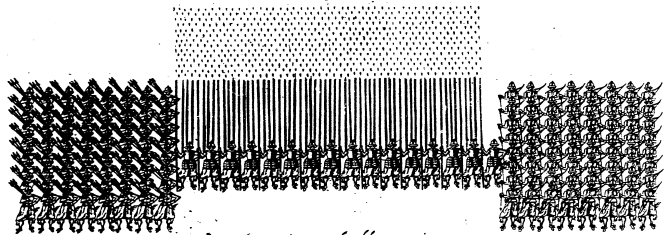


Loce-Phalanx or the narrow fronted
Phalange

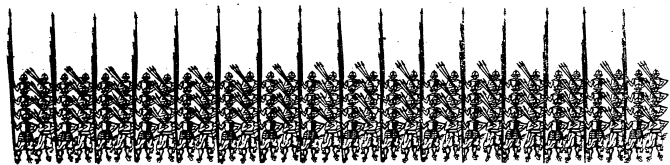


The Front

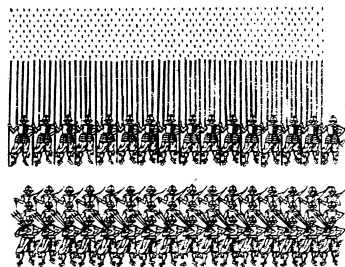
Cap. 31.



Hyporaxis, or double-winging



Entaxis, or insertion



Proaxis, or frontwing

Cap. 32.
The manner of wheeling

The first posture

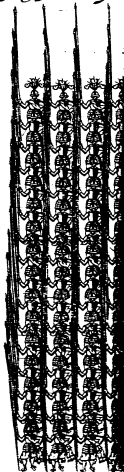


Closing of files



The second posture

Closing of ranks



of Ælian.

37

the right hand, we command the right-hand-file to stand firme, & the rest of the files to turne their faces to the right hand, and to moue close vp to the right hand file. Then to turne their faces, as they were at first: Then the hinder ranks to close forward: Then the whole battaile in that closenesse to wheele about the corner-file-Leader to the right hand. This done, if neede be to reduce it to the first posture, or Station, we command euery man to turne about his face to the Target, or left hand (that is to looke the contrary way.) Then to wheele about the body, that is, as it turned, closed, & ferred with the front to the right hand so to returne it againe to the place, from whence it made the wheeling: Then the file-Leaders to stand firme, and the rest to open their ranks behind: Then to turn their faces about, as they stood at first: Then the right-hand-file to stand fast, and therest turning faces to the left hand to open their files: Then to stand; And lastly to turne their faces againe to the right hand: and so shall euery man haue his first posture.

But in case we desire to wheele to the left hand, we command the left-hand-file to stand still, and all the rest to turne their faces to the left hand, and moue forward close vp to the left hand file: Then to turne their faces as they were; Then to open vp the hinder ranks; Then to wheele the battaile to the left hand, and stand; and so is it done, that was commanded. But if restitution to the first posture be needfull, we must doe, as we did in returning from the right. For euery man must turne about his face to the Pike; Then the whole battaile wheeling about the left-hand-corner-file-Leader must returne to the place, it had; Then all the file-Leaders stand firme, and turne about their faces, and the rest open their ranks in mouing forward and make Alre: Then the left hand file is to stand firme (for it hath the place it first had) and the rest turning their faces to the right hand to open their files, and moue forward, till they haue recouered their first distances; then to turne their faces as at first; and so shall euery man be in his first posture. Now if we would wheele the battaile about, to the pike we are to make 2 wheelings to the same side, so will it come to passe that the file-Leaders shall in the change haue their faces turned to the Reare, where before they had them looking out from the front. But in restoring to the first posture we command it to wheele about to the right hand; That is, we giue it two wheelings more the same way; So the file-Leaders will haue their faces set, as at first. Then we command the file-Leaders to stand firme, and the rest to open their ranks behind; then to turne their faces about; Then the right hand file to stand still (for it hath the right place) and the rest turning their faces to the right hand to march on, till the former distances are regained; then to make Alre. So is the battaile reduced to the first Station.

If you would haue the battaile turne about to the Target, you are to giue contrarie directions; That is, in stead of commanding a double wheeling to the Pike, to command a double wheeling to the Target; Then by making two turnes the contrary way, to vse the like changes, we spake of before.

There is likewise a treble wheeling of the battaile, when it turneth thrice to the same hand, namely to the Pike, or Target. The double wheeling to the Pike transferreth the Souldiers face from the front to the backe of the battaile: The treble wheeling to the Pike bringeth his face to the left flanke. The treble wheeling to the Target contrariwise to the right flank.

Notes:

The Tactics

Notes.

Before in the 26 Chapter Alian discoursed of wheeling, and the kindes thereof. The manner, how it is to be done, is referred for this place, I neede not therefore remember anything else, besides the words of command.

The words of command in Epistrophe.

*The uttermost file on the right or left hand stand firme.
The rest turne faces (to the side purposed) and march vp to the file standing firme.*

Faces as you were.

Close your ranks forward:

Wheele the body (to the hand appointed) and when you haue your ground stand.

Returning to the first Posture, or Anastrophe.

Faces to the right or left hand

Wheele backe the body to the ground, it first had.

File-Leaders stand firme: the other ranker open to their first place.

Faces about (to which hand you will)

The corner file (to which the turning was) stand firme, the rest open to their first ground.

Faces as you were, and order your Pikes.

Petispasmos, or wheeling about.

*In wheeling about, the same wordes to close the files, and rankes, are to bee used, which were used in Epistrophe, there remaineth no more, then to say
Wheele about your body, to the right, or left hand.*

Anastrophe or returning to the first Posture.

Returne to your first Posture.

The same forme is used, that was held in the former returning unto the first posture for opening rankes and files.

Ecpetispasmos, or treble wheeling.

In this motion the same course is held, that was in the wheeling; But only that you command a treble wheeling. And the returning to the first Posture, or Anastrophe is all one, but for the same difference.

*Of closing the battaile to the right, or left hand,
or to the middlest.*

CHAP. XXXIII.

IF we would close, or thicken the Phalange in the right wing, we are to command the right-wing-corner-file to stand still, and the rest turning faces to the Pike to aduance toward the right hand; Then to set their faces as they were, and to gather vp the rankes behinde. In reducing them to the first posture we are to command the file-Leaders to stand, and the rest turning about their faces to open their

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Cap. 32.
The action of wheeling



Cap R
of Congo

Clipping to the middle

The front after clipping

Clipping by
left hand

Clipping by
right hand

When a yard
is cut in a
fall in a
fall in a

their ranks behind
wing counter till to
ceding on to the L
tune their faces as
large to the left wing
If the *Thalange* is
must move their as
fies toward the 19
Then, after they re-
ther up the ranks
When we would
tune face down 4
Ranks, then to un-
ples, and the left 19
recovered their hit
This is to be
out of doing, that
line his name,
The light an-
noid

When a cloth is
partially to the
are to be placed out
to common the man-
return to a square,
part of the two hands
Phalange, I cannot
command, or the first

The right wing, as
The right hand, in a
right hand.
Face, as you move
Edge your fingers

Edge, the right hand
7 the other hand,
Face as you move,
The right wing, as
cut in your first side
I cut in your wings

is different for

The front after clipping

The front after clipping

their ranks behinde ; Then to turne their faces as they were ; Then the right-wing, corner-file to it and (for it hath the right place already) and the rest proceeding on to the Target to follow their Leaders, and obseruing their distances to turne their faces as at first. A contrarie course is to be held in thickning the *Phalange* to the left wing.

If the *Phalange* be to be clofed in the midst, the *Diphlange* on the right hand must turne their faces toward the Target, and the *Diphlange* on the left hand their faces toward the Pike ; Then moue forward toward the midst of the *Phalange*; Then, after their true distance gained, to set their faces, as they were, and to gather vp the Ranks behind.

When we would reduce the *Phalange* to the first posture, wee command to turne faces about; then to open the Ranks, and all to moue on, but the first Rank; then to turne their faces againe, and the right *Diphlange* turning to the Pike, and the left *Diphlange* to the Target to follow their Leaders, till they haue recovered their first distances. Then to set their faces, as they were.

This rule is to be obserued in all turnings about of faces, when they are made out of closings, that the Pikes be aduanced, least they hinder the Souldier in making his turning.

The light-armed are to be taught, and exercised after the same manner.

Notes.

In the 11 Chapter the distances, that ought to be betwixt souldier and souldier, are particularly treated of. This Chapter sheweth, how they are to be gained, that is, how we are to proceede out of one distance into another. And because the open order is it, that is commonly begunne withall, it is here taught how from thence to passe to the rest, and so returne to it againe. The end of closings is spoken of before. In regard of place they are said to be of two kinds: One to the wing (right or left) the other to the midst of the *Phalange*. I cannot expresse the manner better, then by setting downe the wordes of command, or direction, which are these in

Closing to the right wing.

The right-wing, corner-file stand firme

The rest turne faces to the Pike, and moue (according to the distance required) to the right hand.

Faces, as you were.

Closeth your hinder ranks forward, and order your Pikes.

Restoring to the first posture.

File- Leaders stand firme.

The other Ranks, turne faces about, and open behinde to the first distance.

Faces as you were.

The right-wing, corner-file stand firme; the rest turne faces to the Target, and proceede to your first distance.

Faces as you were; and order your Pikes.

Closing to the left wing.

It differeth not from the other, but that the mouing is to the contrarie hand.

Closing

The Tatticks

Closing to the middest of the Battaile.

*The right wing turne faces to the Target, the left to the Pike.
Each move up to the middest of the Phalange, and stand at the distance named.
Faces as you were.
Close the hinder ranks forward, and order your Pikes.*

Restoring to the first Posture.

*The first ranke stand firme.
The rest turne faces about, and open the ranks to the first distance.
Faces as you were.
The files next the middle section stand fast, and the right wing turne faces to the Target, the left to the Pike, and move on till the first distance recovered.
Faces as you were, and order the Pikes.*

We may not forget Elians generall rule for turning of faces out of Closings, that the Pikes be alwaies aduanced. For when you come up to the closeness required, the Pike upon the shoulder will hardly admit turning of the face. The like falleth out when you would open from the Closing.

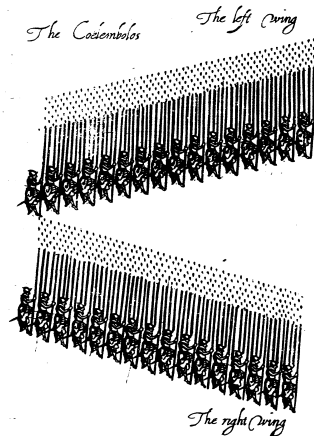
*The vse, and aduantage of these exercises
of armes.*

CHAP. XXIV.

THese precepts of turning about of faces, of wheeling, and double wheeling of the Battaile, and of reducing it to the first posture, are of great vse in fudaine approches of the enemy, whether hee shew himselfe on the right, or left hand, or in front, or in the reare of our march. The like may be said of Counter-marches; Of which, the *Macedonians* are held to be the inuentors of the *Macedonian*; the *Lacedemonians* of the *Lacedemonian*; and for this cause either to haue name accordingly. The Histories witness, that *Philip* (who much enlarged the *Macedonian* kingdome, and overcame the *Gracians* in battaile at *Cheronea*, and made himselfe Generall of *Greece*) and likewise his sonne *Alexander* (that in short time conquered all *Asia*) made small account of the *Macedonian* countermarch, vnlesse necessitie forced it; and that they both by the vse of the *Lacedemonian* became victorious ouer their enemies. For the *Macedonian* countermarch the enemy falling vpon the reare, is cause of great confusion; in as much as the hindermost dismarching toward the front, and making a shew of running away, it more encourageth, and emboldneth the enemy to follow. For feare, and pursuit of the enemy [ordinarily] accompanieth that kinde of countermarch. But the *Lacedemonian* is of contrarie effect. For when the enemy sheweth himselfe in the reare, the Leaders with their followers brauely aduancing, and opposing themselves, it striketh no sin all feare, and terror into their mindes.

CHAP.

Cap. 3.

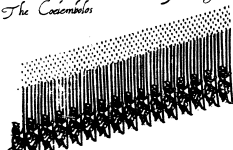


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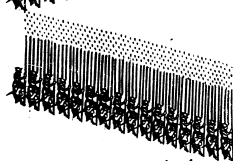
Cap. 36.

The Coelembolos

The left wing

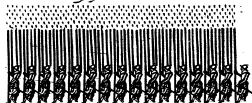


The front

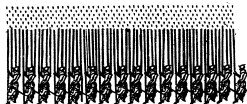


The right wing

The Phalange set against the left wing of Coelembolos



The foregoing Phalange



The Phalange set against the right wing of Coelembolos

Of the signes of direction, that are to be given to the
armie, and their severall kinds.

CHAP. XXXV.

WE are to acquaint our forces both foote, and horse, partly with the voice; and partly with visible signes, that whatsoever is fitting be executed, and done, as occasion shall require. Some things also are to be denounced by the Trumpet, for so all directions will be fully accomplished, and fort to a desired effect. The signes therefore, which are delivered by voice, are most evident, and cleere, if they haue no impediment. But the most certaine, and least tumultuous, are such, as are presented to the eye, if they bee not obscured. The voice sometime can hardly be heard by reason of the clashing of armour, or trampling, and neighing of Horses, or tumult of cariage, or noyse, and confused founds of the multitude. The visible signes also become many waies incertain, by thicknes of aire, and dust, or raine, or snow, or sun-thine, or else thorow ground, that is vneuen, or full of trees, or of turnings. And sometimes it will not be easie to find out signes for all vses, occasional effusions presenting new matter, to the which a man is not accustomed. Yet can it not fall out, that either by voice, or by signal, we should not giue certaine and sure direction.

Of marching, and of diuers kinds of Battails fit for a March: And
first of the right-induction, of the Coelembolos, and
the Triphalange to be opposed against it.

CHAP. XXXVI.

BEING now to speake of marching I will first giue to vnderstand, that some kind of march is a *right-induction*, other some a *Deduction* on the right, or left hand; And that it is a *single*, or *double*, or *treble*, or *quadruple-sided-battaille*. In a *single*, when one enemy is feared; in a *double*, when two; in a *treble*, when three; in a *quadruple*, when the enemy purpoeth to giue on on all sides. Therefore the march is vnderaken sometimes in a *single Phalange*, sometimes in a twofold *Phalange*, or else in a threefold *Phalange*, or in a fourfold *Phalange*.

A *right-induction* is, when one body of the same kinde followeth another, as if a *zenagy* lead, and the rest follow *zenagy*-wise. Or a *Tetrarchy* lead, and theret follow according to that forme. It is so called, when the *march* stretcheth it selfe out into a wing hauing the *Depth* much exceeding the length.

Against it is opposed the * *Coelembolos*, which is framed, when the *Antiflomas* * Hollow
* *Diphilange* disioyneth the *Leading-wings*, closing the *Rear* in manner of the * *Double*
letter V: as the figure after placed doth teach, In which the *front* is directed, & *Phalange*,
the *reare* ioyned, and knit together.

For the *right-induction* pointing at the midst of the enemies battaille, the *Coelembolos* quickly opening before serueth both to frustrate the charge of the *front*, and to clasp in, and circument the *flanks* of the *right-induction*.

Further-

* Treble Phalange.

The Tactics

Furthermore a * *Triphalange* is to be set against the *Calembolos*, one *Phalange* fighting against one *wing* of the *Calembolos*; The second against the other, and the middle, and third forbearing, and expecting a time fit to charge.

Of Parage, or Deduction.

CHAP. XXXVII.

Parage, or *Deduction* is, when the *Phalange* proceedeth in a *wing* not by *file*, but by *rank*, having the Commanders, or *file-Leaders*, either on the right hand, which is called a *right-hand-Deduction*, or on the left hand, which is called a *left-hand-Deduction*. For the *Phalange* marcheth in a *double*, *treble*, or *quaduple-side* according to the place, and part, it is suspected, the enemy will give on. And both the *Parages* beginning the fight in flanke doe make the length double to the depth. This forme of fight was devised to teach a Souldier to receive heedfully the charge of the enemy not only in front, but also in flanke.

Of the Phalange Amphistomus.

CHAP. XXXVIII.

* Double fronted Phalange.

The *Phalange* * *Amphistomus* (for it is so called, because it hath two fronts, and that part of the battaile, that is set, and advanced against the enemy, is called a front) Seeing then in this forme the middlemost are ordered back to backe, and those in front and *reare* make head against the enemy, the one being Commanders of the front, the other of the reare, therefore it is called *Amphistomus*. It is of great use against an enemy strong in Horfe, and able to give a hot, and dangerous charge; and principally practised against those *Barbarians*, that inhabit about the river *Ister*, whom they also call * *Amphippi*, because they change Horfes in fight.

* Horfemen that use two horfes, one before, the other being tied upon.

The Horfe battaile to encounter this forme hath a *Tetragonall* shape, being for the purpose divided into two *broad-squares* (they are *broad-squares*, that have the front twice as much as the depth) And these *Squares* are opposed severally against the divisions of the foot-battaile.

Of the Phalange Antistomus.

CHAP. XXXIX.

* Double flanked Phalange.

The *Phalange* * *Antistomus* is like the *Amphistomus* the forme being a little altered; so that it accustometh the souldier to resist the severall kindes of incursions of Horfe. All that hath bene spoken concerning the former *Phalange*, both for foote, and Horfe agreeth with this figure also. Herein they differ, that the

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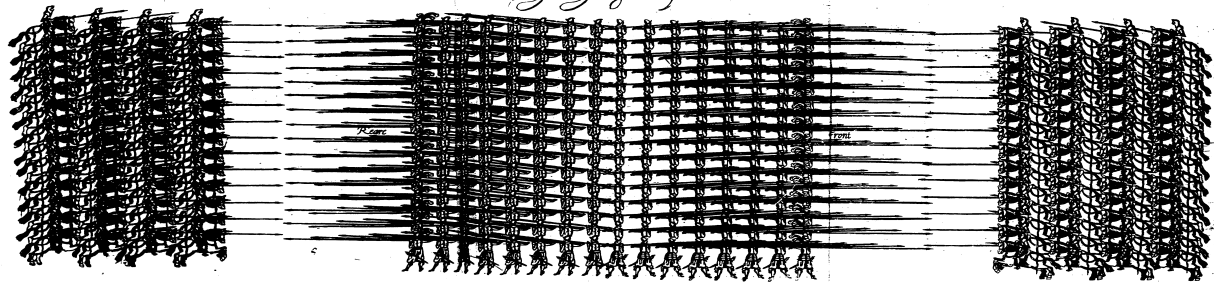
placed not in
n other, and
a left-hand

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Cap. 38.
The Phalange Amphistomus



the *Amphistomus* receiveth the
But as well in the one, as the other
and *Saurastans*. And the one h
forward, the other halfe backward
hath two fronts, the one before,
the back-Commanders stand. And
the fore-front with the one, and t

Of the Diph

A *Diphlange Anisistomus* is that
Deduction outwardly, but in
the reare-Commanders without,
Deduction.

This forme is used when the Hor
*Wedge shooting forth into a point
flanke, and endeavouring to disperse
ders of the footes, foreseeing their pu
intent either to repulse them, or else
lose. For the *Wedge* lieth upon the f
middest, and to disorder the whole b
ceiving well the fury of that kind o
front, and stand like walles on both
the middest, give them a fruitlesse, an

This forme of *Horse-battle* is ca
ted by Philip King of *Macedon*, who pi
weaker fort might be held in, and en
in a sword, the point whereof by reaso
keth way for, and letteth in the midd

Of the Diphlange

CHAP

The *Phalange* of the *Diphlange** Per
the oblique deduction on the right
the left hand oblique deduction the reare
eth the intent of them that fight so on
having bene at first *Terragonall*, divide
right, and the left) of purpose to encl
fearing to bee inclosed transforme the
larger directing one against the right, the
it is called *Peristomus*, as having the front be

Of the Diphalance called Homoiostomos, and
of the Plinthium.

CHAP. XLII.

* A double top-
fronced Plin-
thium.

A Diphalance * Homoiostomos is so named because a whole file (that is 16 men) moving by it selfe, another file followeth it. And it is therefore called Homoiostomos, because they that follow, follow in a like figure.

* A four-sided
battaile square
of men and
ground.

This kinde is opposed against the Plinthium. * Plinthium is a forme of Battaile, that hath the sides equall both in figure and number. In figure because the distances are euery where equall; In number because there are as many men in length, as in depth. In this four-sided Battaile are none in the flanks, but armed, without Archer, or Slinger to helpe. When therefore two Phalanges march together, one by another, and both haue their Leaders either in a right-hand, or left-hand Deduction it is called a Diphalance Homoiostomos.

Of the Diphalance Heterostomos.

CHAP. XLIII.

* A double Plin-
thium with con-
trary flanks.

A Diphalance * Heterostomos is that, which proceedeth by Deduction, hauing the Leaders of the former Phalance in a right-hand Deduction, and of the following Phalance in a left-hand Deduction: so that the battailes march counter-changeably, one hauing the Leaders in one flanke, and the other in the other: and so the rest.

Again of the Battaile called a Rhombe, and of the
foote-halfe moone to encounter it.

CHAP. XLIV.

The battaile framed in forme of a Rhombe, was first inuented by Ileon the Thessalian, and was called Ileon after his name; and to this forme he exercised and accustomed the Thessalians. It is of good vse, in that it hath a Leader at euery corner, at the point the Capitaine, of the Troupe, the reare-Commander behinde, and on either side the flanke-commanders. The foote battaile, fittest to affront this, is the Menoides, or Cressant, hauing both the wings stretched out, and in them the Leaders, and the midst imbowed to inuiron and wrap in the Horsemen in their giuing on. Whereupon the Horsemen ply the foote a farre off with flying weapons, after the manner of the Tarentines, seeking thereby to dissolve, and disorder their circled frame of marching. Tarentum is a City of Italy, the Horsemen whereof are called Acroboliti, because in charging they first cast little Darts, and after come to hands with the enemy.

of

Of the Horse-battaile Heteromekes, and of the
Plagiophalance to be opposed against it.

CHAP. XLV.

The Horse-battaile * Heteromekes is that, which hath the depth double to the length. It is profitable in many respects. For seeming to carry but few into the thickest, and it easily breaketh his forces with the charge of the Horse; yet is nothing broken, but a little of the depth; and the fury of the Horse is carried not vpon the multitude of the foote, but straight, and immediately, into the open field. And for that cause is the length thereof much exceeding the depth.

* A Re-
f.

Of another kinde of Rhombe for Horsemen, and of the
foote-Battaile Epicampios Emprombia to
encounter it.

CHAP. XLVI.

Another sort of Rhomboides there is, whereof I need say no more, but that it is flimsy, and ranketh not. For I haue before shewed the vice, and that Ileon the Thessalian was the inuenter, and that Iason Medeus husband most put it in practise. The vice thereof is great being directed, and lead, in the foure corners by the Capitaine, the Lieutenant, and the two flanke-Commanders. It is commonly fashioned of Archers on Horsebacke, as the Armenian, and Persian manner is.

Against it is opposed the foote-battaile called * Epicampios Emprombia, because the circumduction of the front is like an embowing. The end of this forme is to deceiue and ouer-reach the Archers on Horsebacke either by wrapping them in the void space of the front, as they charge, and giue on vpon the spur, or else disordering them first with their wings, and breaking their fury, by overthrowing them finally with their ranks about the middle Engages. This kinde of Battaile was deuised to entrappe and beguile. For opening the middle hollownesse it maketh shew but of a few, that march in the wings, hauing now withstanding thrice as many following, and seconding, in the reare. So that, if the wings be of power sufficient for the encounter, there needeth no more; if not, retiring easily on either side, they are to ioyne themselves to the bulke of the Battaile.

* The Re-
f.

*Of the foot-bataile called Cyrtte, which is to be set
against the Epicampion.*

CHAP. XLVII.

* *Tetragonal
bataile.*

THE Bataile to be opposed against the *Epicampion* is called * *Cyrtte* of the circumference forme. This also maketh semblance of small forces by reason of the conuexitie of the figure. For all round things appeare little in compasse; and yet stretched out in length, and singled, they proue twice as much, as they appeared to be: as is euident in pillars, which are round; and therefore in fight shew the one halfe, and conceale the other.

The greatest piece of skill in embattailing, is to make a shew of few men to the enemy, and indeed to bring twice as many to fight.

*Of the Tetragonal Horse-bataile and of the wedge
of foote to be opposed against it.*

CHAP. XLVIII.

* *Four-square.*

THE * *Tetragonal Horse-bataile* is square in figure, but not in number of men. For in *Squares* the number is not alwaies the same: and the General for his advantage may double the length to the depth. The *Persians*, *Sicilians*, and most of the *Grecians* doe affect this forme, and take it to bee easie in framing, and better in vse.

* *Wedge.*

Against it is opposed the *Phalange* called * *Embolos*, or *Wedge* of foote, all the sides consisting of armed men. This kinde is borrowed of the *Horse-mans wedge*. And yet in the *Horse-wedge*, one sufficeth to lead in front, where the Foote-wedge must haue three, one being vnable to beare the sway of the encounter. So *Eparinondas* the *Theban* fighting with the *Lacedemonians* at *Mantineæ*, ouerthrew a mightie power of theirs by casting his armie into a *Wedge*. It is fashioned if the *Anisistomus Diphalangy* in marching ioyn the front of the wings together, holding them open behind like vnto the letter A.

*Of the foot-Bataile called Ploesium, and of the win-
ding, or saw-fronted foot-bataile, to
encounter it.*

CHAP. XLIX.

THE Bataile *Ploesium* hath the length much exceeding the depth. And it is called *Ploesium*, when armed foote are placed on all sides, the Archers, and Slingers, being throwne into the midst. Against this kinde of Bataile is set the *winding-fronted-bataile*, to the end that with the vnequall figure, they may

traîne

traîne out those of the *Ploesium* to cope with the foremost of the *winding-fronted-bataile*, and by that means dissolve, and disorder the thickest of the same. And the file-Leaders of the *winding-bataile* are to obserue, and marke the file-Leaders of the *Ploesium*, that if they still maintaine their closenesse, and light ferred, they also encounter them in the like forme; if the *Ploesium* file-Leaders seuer themselves, and spring out from their maine force, then they likewise bee ready, to meet them man to man.

*Of Hyperphalangesis, and Hyperkerasis, and
of Attenuation.*

CHAP. L.

HYPERPHALANGESIS, or *ouer-fronting* is, when both wings of the *Phalange* ouer-reach the enemies front. *Hyperkerasis*, or *ouerwinging* is, when with one of the wings we ouer-reach the front of the enemy. So that hee, that *ouerfronteth*, *ouerwingeth*, but hee, that *ouerwingeth*, *ouerfronteth not*. For they, that match nor the enemy in multitude, may yet *ouerwing* them.

ATTENUATION or lessening is, when the depth of the bataile is gathered vp, and in stead of 16 men a smaller number is set.

Of conueyng the Carriage of the Army.

CHAP. LI.

THE leading of the carriage, if any thing else, is of great importance, and requieth a speciall Commander. It may bee conueyed in siue manners, either before the Armie, or behinde, or on the one flanke, or the other, or in the midst.

Before the Army, when you feare to bee charged behind. Behind the Army, when you would leade toward the enemy. When you feare to bee charged in flanke on the contrary side. In the midst, when a *hollow-Bataile* is needfull and fit.

*Of the words of Command, and certaine obser-
uations about them.*

CHAP. LII.

LAST of all wee will briefly repeate the words of direction, if we admonish, first that they ought to be short, then that they ought to be without *double-signification*. For the Souldiers, that in hast receive direction, had neede to take heed of doubtfull words, least one doe one thing, and another the contrarie. As for the

N 3

purpose

The Tactics

purpose: If I say *turne your face*, some it may be, that heare mee, will turne to the right, some to the left hand, and so no small confusion follow. Seeing therefore these words *turne your face* import a generall signification, and comprehend *turning to the right, or left hand*, we ought in stead of saying *turne your face to the pike*, to pronounce it thus: *To your Pike turne your face*, that is, we ought to set the particular before, and then inferre the generall. Like reason is, if you say, *turne about your face*, or *countermarch*. For there are also generall words; And therefore wee should do well to set the particular before. As to the *Pike turne your face about*, or to the *Target turne your face about*. Likewise the *Lacedemonian countermarch*, nor the *Counter march Lacedemonian*. For if you place the word *Countermarch* first, some of the Souldiers will happily fall to one kind, other to another kinde of *Countermarch*. For which cause words of double sense are to be avoided, and the special to be set before the generall.

Of silence to be used by Souldiers.

CHAP. LIIII.

BUt above all things silence is to bee commanded, and that heed be given to directions: As *Homere* specially signifieth in his descriptions of the *Gracian* and *Troian* fights.

*The skillfull Chief-taines pressed on, guiding with carefull eye
Their Armed troupes, who followed their Leaders silently,
T'was surely would have seem'd, each one of all that mighty thronge
Had been bereft of speech, so bridled be his beedfult tongue,
Fearing the dread Commanders checke, and awfull best's among.
Thus march'd the Greeks in silence, breathing flames of high desire,
And fervent zeale, to backe their friends, on foes to wreake their ire.*

As for the disorder of the Barbarians he resembleth it to birdes saying.

*As shoales of fowle, geese, cranes, and swannes with necks far stretched out,
Which in the stumy fennes Caisters winding streames about
Sheare here, and there, the liquid skie, sporting in wanton wing.
Then fall to ground with clanging noise, the fennes all over ring:
None other wise the Troians fill the field with heaped sounds
Of broken, and confused cries, each where tumult abounds.*

And againe:

*The Captaines marshall out their Troupes ranged in goodly guise:
And forth the Troians pace like birds, which lade the aire with cries.
Not so the Greeks, whose silence breathed flames of high desire,
Fervent in zeale to back their friends, on foes to wreake their ire.*

CHAP.

The words of Command.

CHAP. LIIII.

Thus then are we to command.

- T**O your Armes.
Stand by your Armes.
Carriage away from the battaile.
Marke your directions.
Seperate your selues.
Advance your Pikes.
File and ranke your selues.
Looke to your Leader.
Reare Commander order your file.
a Keepe your first distances.
b Faces to the Pike, moue a little further, stand so, as you were.
b Faces to the Target, moue a little further, stand so.
b Faces about to the Pike, moue a little further, stand so.
c Double your Depth. To your first posture.
c Double your Length. To your first posture.
d The *Lacedemonian countermarch*. To your first posture.
d The *Lacedemonian countermarch*. To your first posture.
d The *Choræan countermarch*. To your first posture.
e Battaille wheele to the Pike. To your first posture.
e Battaille wheele about to the Pike. To your first posture.

a Before cap. 11.

b Before cap. 15.

c Before cap. 29.

d Before cap. 28.

e before cap. 26.

These precepts of the *Art Tacitike* (most inuincible *Cæsar*) I haue laide out to your Matie, which will be a means of safety to such, as shall use them, and of the ouerthrow of their enemies.

℞ 4

The



THE EXERCISE OF THE ENGLISH IN

the seruice of the high and mighty Lords,
the LORDS the ESTATES of the vni-
ted PROVINCES in the Low
COUNTRIES.



THE Soldiers are diuided into two kinds, *Foote* and *Horse*. The *Foote* againe are of two kinds; *Pikemen* and *Muskettiers*.

Pikemen are armed with a head-peece, a Curace and Tases defensiuue, and with a Pike of fiftene footel long, and a Rapier offensiue. The Armour is all yron; the Pike of Aſhen wood for the Steale, and at the vpper end an yron head of about a handfull long with cheekes about the length of two foote, and at the butt-end a round strong locker of yron ending in a pike, that is blunt, yet sharpe enough to fixe to the ground. The forme thereof is expressed in the grauen figure.

The *Muskettier* hath a head-peece for defence, a *Musket*, the barrell of the length of 4 foote, the bore of 12 bullets to the pound; a Banelier, to which are fastned a convenient number of charges for powder (sometimes as many as 15 or 20) a leather bagge for bullets, with a pruning yron; a Rest for the *Musket* with an yron forke on the vpper end to support it in discharging, and a pike on the nether end to sticke into the ground; lastly, a Rapier. The figure of this armour also is here inserted.

These soldiours, both Pike-men, and Muskettiers, are diuided into Companies; and every Company consisteth, halfe of Pikes, halfe Muskettiers. The Companies are some more in number, some lesse. Some reach to 300 men, some 200, some 100, some 90, some 80, some 70. Euery Company hath these officers of the field: A Capitaine, a Lieutenant, an Ensigne, 2 Serieants, 3 Corporalls, two Drommies; and for other vſes a Clerke, a Surgion, and a Prouost.

Companies are compacted into Regiments; and the Regiments commanded by Coronells. Regiments containe not alwaies a like number of Companies, some hauing 10, some 11, 12, 13, 14, 15, some 30 Companies and aboue. In every Regiment are a Coronell, a Lieutenant Coronell, a Serieant Maior, all officers of the field; a Quarter-master, and a Prouost-martiall for other employments. It shall not be greatly to the purpose to mention higher officers, then Coronells, my principall intent being no other, then to set downe the armes and exercise of our Nation in the said vnited Provinces. Their armes are spoken of. Their exercise followes.

The

First both Pikes and Muskets are ordered into files of 10 deepe. The Musketers are sometime placed before, sometime in flanke, sometimes in the reare of the pikes.

To exercise the motions, there are two distances to be observed.

The first is when every one is distant from his fellow 6 foote square, that is in file and ranke 6.

The second is when every Souldier is 3 foote distant one from the other as well in file as in ranke.

And because the measure of such distances cannot be taken so iustly by the eye, the distance of 6 foot betwixt the files is measured, when the Souldiers stretching out their armes doe touch one another hands: and betwixt the Ranks, when the ends of their pikes come well nigh to the heeles of them, that march before. And the measure of 3 foote betwixt the files is, when their elbows touch one another; betwixt the ranks, when they come to touch the ends of one another's Rapiers.

For to march in the field, the distance of 3 foote from file to file is kept, and of 6 foote from Ranke to Ranke.

To order themselves in Battaile, as also to goe towards the enemy, the distance of 3 foote in file, and ranke, is observed; and likewise to conversion or wheeling on.

The Musquetters also going for to shoote by Ranks keep the same distance of 3 foot, but going to skirmish they goe *a la Disbande*, which is out of order.

There is yet another sort of distance, which is not vsed, but for to receiue the enemy with a firme stand, and seruethe for the pikes onely (for the Musquetters cannot be so close in files, because they must haue their Armes at liberty) & that is, when every one is distant from file to file a foote and a halfe, and 3 foote from Ranke to Ranke. And this last distance is thus commanded, *Close your files thoroughly*. But it is not to be taught the Souldiers, for that, when necessitie shall require it, they will close themselves but too much, of their owne accord without command.

To begin therefore to doe the exercises, the Company is set in the first distance, to wit of 6 foote in file, and ranke, and thus is said

Stand right in your files.

Stand right in your ranks.

Silence.

To the right hand.

As you were.

To the left hand.

As you were.

To the right hand about.

To the left hand as you were.

To the left hand about.

To the right hand as you were.

These are the generall words of Command which are often to be vsed.

You must note that when they are commanded to be as they were, they must returne shilber, from whence they parted; and if they turned to the right hand, they must returne to the left, and so in countermarch.

To

To the right double your ranks.
Ranks as you were.

To the left hand double your ranks.
Ranks as you were.

To the right hand double your files.
Files as you were.

To the left hand double your files.
Files as you were.

With halfe files to the right hand double your Ranks.
Halfe files as you were.

With halfe files to the left hand double your Ranks.
Halfe files as you were.

Files to the right hand countermarch.
Files to the left hand countermarch.

To the right hand or left at discretion as you were.

Ranks to the right hand countermarch.
Ranks to the left hand countermarch.

To the right or left hand as you were.

Close your Files }
Close your Ranks } to 3 foote distance.

Understand that in Closing from the outsidest to the middle the Soldier is to stand in his distance of 3 foote in file, and not closer.

To the right hand wheele.

To the left hand wheele.

Open your Ranks backwards in your double distance to wit at 12 foote, and this for a single Company.

Ranks as you were, &c. at the first.

In opening Ranks or Files, you must keepe them closed vntill the second Ranke or File beginning from the outsidest haue taken their distances, and so shall the rest remaine close vntill euery Ranke or File haue taken their distances in order.

Open your files, to wit to the first distance of 6 foote.

If you will command to close files to the right hand or left hand, the outmost file standeth still, and the rest close to that file.

For the Pike with a firme stand.

Advance your Pikes.

Order your Pikes.

Slope your Pikes.

Charge

Charge your Pikes.
Order your Pikes.
Traile your Pikes.
Cheeke your Pikes.

More for the Pikes first with a firme stand and then marching.

Charge your Pikes.
Slope your Pikes.
To the right hand charge your Pikes.
Slope your Pikes.
To the left hand charge your Pikes.
Slope your Pikes.
Charge your Pikes to the Reare.
Slope your Pikes.
Order your Pikes.

This must be obserued charging your Pikes with a firme stand to set the right foote behind, and charging the Pikes marching to set the left foote before.

For the Musquet.

THe Postures in his Excellencies Booke are to be obserued; but in exercising you must onely vie these three termes of direction.

Make ready.

Present.

Give fire.

Your Musquetters must obserue in all their motions to turne to the right hand, and that they carry the mouth of their peeces high, as well when they are shouldred, as in pruning, and also when they hold their pannes garded, and come vp to giue fire.

The enemy before the Vanguard.

In advancing towards an Enemy, when they doe not skirmish loose and dibanded, they must giue fire by Ranks after this manner.

Advancing.

Two Ranks must alwaies make ready together, and aduance ten paces forward before the body, at which distance, a Sergeant (or when the body is great some other officer) must stand, to whom the Musquetters are to come vp before they present, and giue fire, first the first ranke. And whilst the first giues fire, the second Ranke keep their Musquets close to their Rests, and their pannes garded, and as soone, as the first are fallen away, the second presently present, and giue fire, and fall after them.

Now as soone as the first two Ranks doe move from their places in the front: The two Ranks next them must vnshoulder their Musquets, and make ready, so as they may aduance forward ten paces as before as soone as euer the two first ranks are fallen away; and are to doe in all points as the former. And all the other Ranks running the whole diuision must doe the same by twos, one after another.

A manner

A manner there is to giue fire retyring from an Enemy, which is performed after this sort.

As the Troope marcheth the hindermost ranke of all keeping still with the Troope is to make ready, and being ready, the fouldiers in that ranke turne altogether to the right hand and giue fire, marching presently away a good round pace to the front, and there place themselves in ranke together iust before the front: As soone as the first ranke turne to giue fire, the ranke next makes ready, and doth as the former, and so the rest.

The enemy in the Reare.

We giue fire by the flanks thus. The vppermost file next the Enemy must be commanded to make ready, keeping still along with the body, till such time, as they be ready, and then they turne to the right, or left flank (according to the sight of their enemies either vpon the right, or left flank) and giue fire altogether. When they haue discharged they stirre not, but keepe their ground, and charge their Peeces againe in the same place, they stand. Now as soone as the foresaid file doth turne to giue fire, the vtermost next it makes ready alwaies keeping along with the Troope till the Bringer-up be past a little beyond the Leader of that file, that gaue fire last; and then the whole file must turne, and giue fire, and doe in all points as the first did, and so the rest one after the other. A Sergeant, or if the Troope be great some other better qualified Officer must stand at the head of the first file, and as soone as the second file hath giuen fire, and hath charged, he is to lead forward the first file vp to the second file, and so to the rest one after another, till he hath gathered vp againe the whole wing, and then he is to loyne them againe in equall front with the pikes.

The enemy in flank.

Last of all the Troope or whole wing of Musquetters makes ready altogether, and the first ranke without aduancing giues fire in the place they stand in, and speedily as may be, yet orderly falls away, all the ranks doing the same successively one after another.

The enemy in front without aduancing.

Thus much of the armes and exercise of the foote.
The horse ensue.

The order and discipline holden in Horse-troopes, or in the Cavalry.

THE Cavalry hath for his Cheife the Generall, the Lieutenant Generall; and the Comissary generall.

To the Cavalry there is a Quarter-master generall, and a Prouost generall belonging; the lustice resorteth to the Councell generall of warre of the Army.

The Cavalry is of two sorts. *Harcquebustiers*, and *Cursifters*.

The first haue for defensie armes, the *Curace* piltoll prooffe, and a light head-peece. For offensie the *Carbine* of 3 foote, 3 inches length, and the bore of 20 bullets in the pound, and *Pistols* like vnto the *Cursifters*.

The *Cursifters* haue for defensie Armes a compleat armour, the *Curace* piltoll prooffe. For offensie two piltolls hauing the barrell of 26 inches in length, and the bore of 36 bullets in the pound. See the figure of Armes.

For the order in Regiments the 40 Companies entertained by the States doe make eleuen Regiments.

The Regiment of the Generall hath alwaies the Vantgard, the others alternately

natiuely and by turnes, and he that hath it this day, the next day after hath the Reare, the rest following in the same sort.

Those which command the Regiments are called *Coronells*. The Regiments are compounded of 3, or 4 Companies (of 3 at the least) and the Coronells Company marcheth alwaies on the left wing of the Regiment.

The Captaines receiue orders from their Coronells, as these from the Com-missary Generall.

All the Companies are diuided in 3 equall parts, which are called Squadrons, and distributed to the three chiefe officers; Capitaine, Cornett, and Lieutenant, hauing each of them adioyned an old Souldier, which they doe know to bee of more desert, called a Corporall.

Marching in the field, euery Officer marcheth at the head of his Squadron, the Lieutenant excepted, which marcheth behind with the Quartermaster; and the third Corporall at the head of the Lieutenants Squadron.

The Companies are diuided by files, and ranks, the file 5 deepe, and no more, how strong fouer the Company be.

They obserue that in marching in battaile they must be close together, and to doe the *hustons* there must be 6 foote distance from one Horseman to another.

The Companies being in battaile, there must be 25 paces distance left between euery Company, and 50 betwixt euery Regiment at the least.

The exercise of Armes for the Cavalry.

To open the Squadron you must first open the ranks and after the files.

To close the Squadron, you must first close the files, and after the ranks.

There be two sorts of distances betwixt the files; the one close, and the other open.

In the Close there must be no distance or intervalls betwixt the files, to the open there must be 6 foote betwixt euery file.

Likewise there must be two sorts of distances betwixt the ranks; the Close, which must be without intervall or streete; and the Open, which must be six foote distance.

In a march it must be vnderstood, that the ranks must neuer be more opened, then the open distance of 6 foote.

And to the end that the Troope may march in good order, and obserue well their distance betwixt the ranks, without that the last may be forced to runne or goe to fast, there must be heed taken, that so soone, as the first ranks begin to march, all the Troope, and the Reare also at one time march.

The words of Command are

Open your Ranks.

Open your files.

Stand right in your ranks.

Stand right in your files.

To the right hand.

As you were.

To

To the left hand.

As you were.

To the right hand about.

To the left hand as you were.

To the left hand about.

To the right hand as you were.

Files to the right hand countermarch.

Files to the left hand countermarch.

To the right or left hand as you were.

Ranks to the right hand countermarch.

Ranks to the left hand countermarch.

Close your files.

Close your ranks.

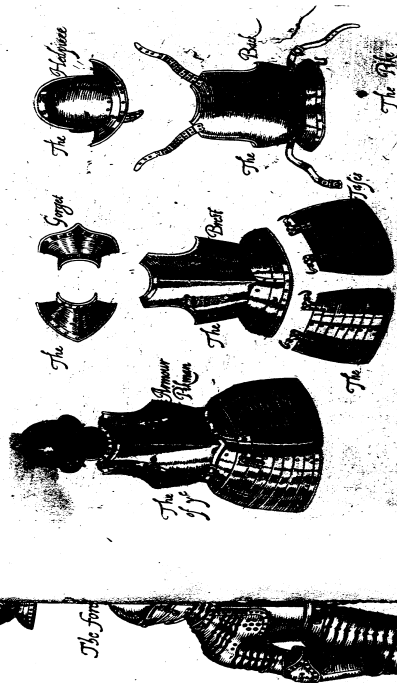
To the right hand wheele.

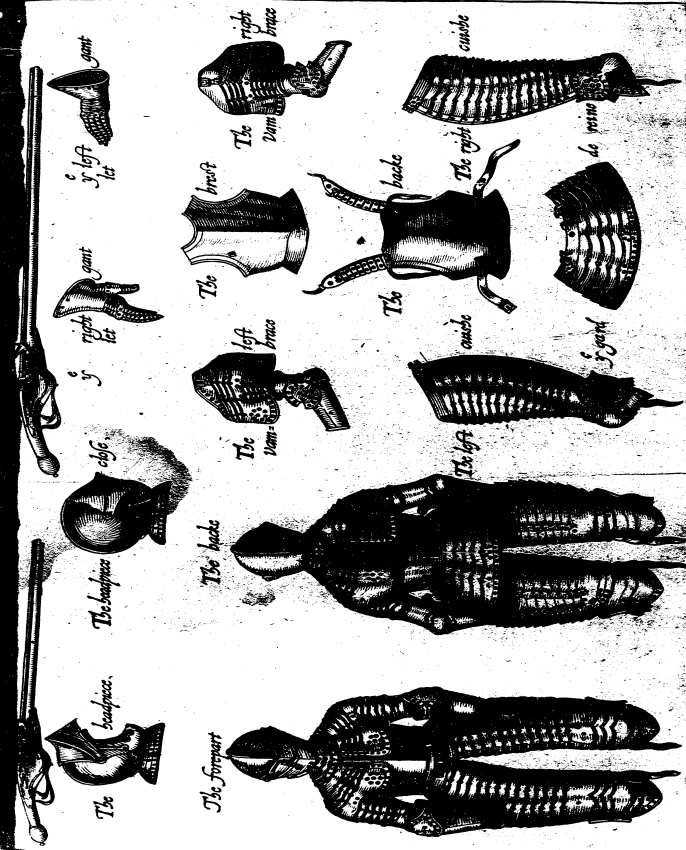
To the left hand wheele.



Ranks

*Dag. in the margin both, for *Spurwurm* read *Sperwurm*, pag. 1. lin. so for *was*, and lin. 31. for *Bir-
 cula*, *Birrena* and in the margin, lin. 40. for *Dysophis*, *Dysophis*, pag. 10. lin. 16. *adama* margin for *Adrian*, *Adrian*,
 pag. 1. lin. margin, for *Dysophis*, *Dysophis*, pag. 1. lin. 1. for *Ther*, *Ther*, *Ther*, *Ther*, *Ther*, *Ther*, *Ther*, *Ther*, *Ther*, *Ther*,
 1. 11. for *Ochans*, *Ochans*, 1. 13. *de* *Ther*, *Dysophis*, 1. 15. *de* *Ther*, *Dysophis*, 1. 16. *de* *Ther*, *Dysophis*, 1. 17. *de* *Ther*,
 1. 18. *de* *Ther*, *Dysophis*, 1. 19. *de* *Ther*, *Dysophis*, 1. 20. *de* *Ther*, *Dysophis*, 1. 21. *de* *Ther*, *Dysophis*, 1. 22. *de* *Ther*,
 1. 23. *de* *Ther*, *Dysophis*, 1. 24. *de* *Ther*, *Dysophis*, 1. 25. *de* *Ther*, *Dysophis*, 1. 26. *de* *Ther*, *Dysophis*, 1. 27. *de* *Ther*,
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FINIS.

THE ART OF
EMBATTAILING

AN

ARMY.

OR,

THE SECOND PART OF
ÆLIANS TACTICKS.

WITH NOTES VPON
EVERY CHAPTER.

By Capt. JOHN BINGHAM.



LONDON.

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1629.



TO THE RIGHT VVOR-
SHIPFULL SIR HUGH HAMERSLY,
Knight, one of the Aldermen and Coronels of the
Honorable City of LONDON, and President of the
Martiall Company, Exercising Armes in the Artillery
Garden in LONDON.

TO CAPTAINE HENRY VVALLER,
NOW CAPTAINE OF THE
SAID COMPANY.

AND

TO ALL THE REST OF THE
Worthy Captaines and Gentlemen of the
said Company.

Captaine I. B. wisheth such valour and experience,
as may make them victorious against all
forts of Enemies.

Worthy Gentlemen:



*These my last endeouours vpon Ælian, I
purposed to haue kept to mine owne pri-
uate vse, and not to haue presented
them to the view of the world. But now
being to depart from you, and to iourney
into a farre Countrey, and finding your
kindnesse and loue toward me such, as I was not with any
reason to expect, I altered my minde, and hauing nothing
else*

A 3

The Epistle Dedicatory.

else to offer unto you, I resolved to make this a monument of my thankfulness to you, and a testimony of my desire to doe you the best service I am able. For my paines herein, I leaue them to the iudgement of any learned Reader; for the profit of the Treatise, I say no more but this, it containeth the practise of the best Generals of all antiquity concerning the formes of Battailles. And whereas many bold opinion, that it sorteth not with the vse of our times, they must giue me leaue to be of another mind: Indeed our actions in Warre are onely now a dayes and sieges oppugnations of Cities; Battailles wee heare not of, saue onely of a few in France, and that of Newport in the Low-Countries. But this manner will not last alwayes, nor is there any Conquest to be made without Battailles. He that is Master of the field, may dispose of his affaires as he listeth; he may spoyle the Enemies Countrey at his pleasure, he may march where he thinketh best, he may lay siege to what Towne he is disposed, he may raise any siege that the Enemy hath layed against him or his. Neither can any man be Master of the field without Battaille, in ordering whereof, that Generall that is most skilfull, seldome misseth of winning the day: experience of former times cleares this. I should exceede the compasse of an Epistle if I brought the examples, which serue to this purpose. Now for the skil of ordering Battailles, it is not to be learned out of the practise of our dayes, wherein when we come into the field, we make shewes, and musters rather, then obserue any formes of Battailles for vse: Battailles must not be alwayes of one figure. The wise Generals of antient times, fashioned their battailles according to the range, which they saw the Enemy had before taken vp. The place often maketh an altera-

The Epistle Dedicatory.

alteration in that forme, which otherwise would serue to our purpose. He that is acquainted but with one forme, if he be forced to change that upon the sudden, disordereth his troopes, and bringeth all into a confusion. The knowledge of the formes of battailles being then so necessary for a Generall, this little Pamphlet must needs be welcome to them that desire the manning of fields, and the command of Armies. For here haue you all formes expressed, together with their vse; so that the Generall that is acquainted with the practise of these precepts, shall not be to seeke to make transmutation of his battaille, into what forme soeuer necessity shall require, & that upon the sudden. As for them that hold, that great Ordnance will not admit any of these ancient formes in our dayes, I hold that for a dreame, and not worthy the answering; since the inuention of great Ordnance, we neuer read of any forme of battaille disordered thereby. Some slaughter hath beene made by great Ordnance, and the Army that suffered by great Ordnance, hath beene forced the sooner to ioyne with the Enemy; when the Armies are ioyned, great Ordnance hath and must sit still, and looke about as an idle Spectator, seruing for no other vse, then for a pray to him that gaineth the field. Now for small shot, it succeedeth in the place of the light-armed of antiquity. By them a Battaille may be broken, if they be not repressed, and themselves cut off in time. But what is said of them, that may not be said of Bowes and Arrows? The greatest fields that we gained against the French, were gained onely by our Archery. To say nothing of other Nations, that haue the skill of shooting: so that no reason can be alleadged why the formes of Battailles used by antiquity for aduantage, may not be as well used in our dayes.

The Epistle Dedicatory.

dayes. Howsoever the matter standeth, my desire is, that the Treatise may with your fauourable acceptance beare your names in the Front thereof. Not because I thinke it worthy of your Patronage, but for that I would haue it appeare to the world, how much I esteeme of your kindnesse (as I said) and of your loue, which you expressed toward me in my taking leave of the City. The Lord of hostes haue you in his keeping.

Your seruant, as heretofore,

to doe you seruice.

JOHN BINGHAM.



THE TACTICKS OF *ELFAN*, OR THE ART OF EMBATTAL- LING ARMIES.

The broad-fronted Phalange, the deepe Phalange, or Horse, and the vneuen-fronted Phalange.

CHAP. XXX.



(2) *Lagiphalange*, or the broad-fronted *Phalange*, is that, which hath the (2) length manifoldly exceeding the depth.

(3) *Orsiphalange*, or the deepe *Phalange* (now commonly called the *Horse*) is that, which proceedeth by a (4) winge, hauing the depth much exceeding the length. In generall speech euery thing is called (5) *Paramaker*, which hath the length more then the depth; and that which hath the depth more then the length

(6) *Orthien*: and so likewise a *Phalange*.

The *Phalange* (7) *Loxe*, or vneuen-fronted, that is, which putteth forth one of the wings (which is thought fittest) towards the Enemy, and with it begins the fight, holding off the other in a conuenient distance, till opportunity be to aduance.

NOTES.

This Chapter and the next, seeme not to hold their right place: for being set before the manner how to wheele, and likewise before closings, and inserted betwixt the motions of the *Phalange* (to which *Battail* motions, or to one of them, the manner of *wheeling* and *closing* appertaine) they interrupt the method or orderly handling of the said motions; which method *Elfan* curiously obserueth through his whole Booke. Besides, *Elfan* him selfe, after a manner pointeth out the true place of them, in that in the 32 Chapter, rehearsing shortly the appellations or words of Military discipline, he placeth these formes after Induction and Deduction: I take it therefore, that their proper place is after the 37 Chapter, the rather, because the formes of Marches from thenceforth handled, are either *Squares* of the one kinde or other, or else spring out of these *Squares*. I have noted before

The Tactics of Ælian, or

fore, that there are three kinds of Squares; one, that hath a longer front than flanke; another, that hath a longer flanke, then front; the third, that hath the front and flanke equal. Of the third *Ælian* speaketh in the 42 Chapter, of the first and second in this Chapter: of these two therefore I will treat in order. And first I will handle the *ῥάγες*, then the *ῥέγε*, lastly the manner how to transforme one into another.

The first is called

1. *Plagiophalanx*, or the broad-fronted Phalanx.) The word *ῥάγες* is often interpreted for oblique, which signification it cannot haue heere; the oblique Phalanx being in this Chapter termed by the name of *ῥέγε*, and yet distinguished from the *Plagiophalanx*. They that translate *Plagiophalanx*, the transuerse or over-thwart fronted Phalanx, agree better with *Ælian*'s meaning, because it meeteth the enemy with a front transuerse, and drawne out in length, and directly opposite against him. I have rendered it the broad fronted Phalanx, as more fitting the English tongue: It may also be called the long-fronted Phalanx. For breadth (I have remembered it before) and length of a Phalanx are all one: In this sense is the word *ῥάγες* used by *Ælian*, being applied to the manner of bearing of a Pike. He telleth, that *Alexander* transported his Army over the river *Ῥίον*, to invade the territory of the *Gætes*; and hath thus, *The number of shofes that passed the river with Alexander, were about 1500 horse, and 4000 foot. They passed in the night, and landed where the Corne was high, which was the cause that their arrival was not desired. At sevene as the morning appeared, Alexander led them through the Corne field; Commanding the foot, that bearing downe the Corne with their Pikes held a thwart, whereas the encounter they should march into the Champeigne. The manner of their bearing of Pikes (as I interpret it) was this: Theyooke the Pikes in the midft with both their hands, and to bore them out, not with the points forward, but crosse and parallel the front of the Phalanx, that the file leaders with one ioynt force might ledge and beare downe the high-growne Corne, and make easier passage for those that followed. If they had carried them out slope, or oblique (which is the other signification of the word) it had bene no more, then the particular force of every man a part, that held his Pike sloping; besides that, they would haue bene intangled in the Corne; whereas the bearing of them crosse parallel with the front, was the ioynt force of so many file-leaders, as did thrust forward against the Corne. Therefore as when the Pike is borne in full length crosse the front of the battaile, the posture of the Pike is said to be *ῥάγες*, so is a Phalanx termed *ῥάγες*, that hath a front stretched out in euen length, and opposed against the euen front of the aduersie battaile of the enemy.*

2. *The length manifestly exceeding the depth:* *Ælian* sets not downe expressly any proportion of the excess of the length above the depth, onely he saith, it must manifestly exceed the depth: We must take it then, that the excess of the length must beare the least threefold; for *thrice* falls into the appellation of manifold. A *Macedonian square Phalanx* may iustly challenge this name, being 1024 men in length, onely 16 in depth. And likewise a *Phalangarch* led severally and by it selfe, as having 256 men in length, but 16 in depth. The rest of the bodies of the *square Phalanx*, till you come downe to a *Pentecostarchy*, albeit ranged by themselves, are likewise *Plagiophalanges*, or broad-fronted battalies. A *Pentecostarchy* hath onely twice

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twice so many in front, as in flanke (as 32 in front, 16 in flanke) and therefore cometh not vnder the name of a broad-fronted Phalanx. So that, let the battaile be as long as you list, hauing but the ordinary depth, it still is accounted a *Plagiophalanx*. When it is but twice so long in front as in flanke, it cannot deserue that name, but it is to be termed rather a Square of ground, because the flanke in a square of ground taketh vp as much ground as the front. To the *Battaille broad-fronted*, is next added the *Phalanx*, called

3. *Orthiophalanx*, or *Herle* which albeit it haue the length and depth vnequall, as hath the *Plagiophalanx*, or broad-fronted Phalanx, yet must the depth manifestly exceede the length, which is contrary in the *Plagiophalanx*. This saith *Ælian* proceedeth in

4. *A wing.* To proceede in a wing is to march on with a parcell or one body of the Army, namely with a certaine number of files (as with a *Tetrarchy*, *Taxis*, or *Syntagma*) and to follow with the rest in like manner, so that the whole army holdeth no proportion of length or breadth to the depth. That which is called by *Ælian* *Orthiophalanx* is called by *Diodorus Siculus*, and by *Ælian*, *ῥάγες*, a deepe phalanx, because the forme of it ariseth out of the depth of the embattailing, as I haue noted vpon the seuenth Chapter. This kinde of march the Greeke writers expresse by the words of leading *ῥάγες* and *ῥάγες*, that is, in a wing; whereas the other kinde with a large front (I meane the broad-fronted Phalanx) is said to be led *ῥάγες*, and *ῥάγες*, in a Phalanx, and *ῥάγες*, in extension of breadth. The words I recite to helpe them, who although they be skillfull in the Greeke tongue, yet are not so well acquainted with the Tactics, and may easily mistake, or not vnderstand the signification, if they be not forewarned. But because I haue before in my notes vpon the seuenth Chapter touched this matter, I will here vte an example, or two, onely to explaine, and to giue light to both formes. *Ælian* in a report, that when *Alexander* was to passe the river *Gramicos*, on the further side whereof the *Persians* had embattailed themselves in a broad-fronted phalanx to hinder his passage, *Permenio* one of his eldest and best Commanders came vnto him, and gaue him this counsell, Sir, said hee, Consider the *Persians* are ready to encounter you on the other side; my opinion is, you cannot gaine the passage without exceeding danger: both because your phalanx cannot be led in front (that is, in a broad front) by reason of the many and sundry depthes that are to be scene in the River, and of the height and steepnesse of the banks, as also for that the enemies horse ordered in a phalanx, will be ready to charge vs, whilst we disorderly and wingwise (which is the weakest kinde of fight) endeavour to scamble vpon the banks. Thus *Ælian* vnting the words before recited, and noting the difference of both the formes, *Leo* hath the like passage, instructing his Generall how in the night to surprize an Enemy in his lodging. His words are these in effect; When you march, saith he, to the intent that no tumult or confusion of noise be heard, nor the breaching out of your battaile into a great length breede error and inequality in marching; and hereupon cries and notes, It behooveth you to march not in front, that is, in a large extension of breadth, but wingwise, that is to say, in a deepe forme of Embattailing; as if one file should follow in the reare of another, observing still to maintain the depth, or thicknesse of the battaile. His meaning is: That in the night an Army ought not

4. *Pentecostarchy*,
chy hath in it 256
men.
The ordinary
depth is 16.

5. *Alion* c. 3. 102
4000, 5000 emb
attailing. Leo c. 3.
577.

6. *A body of*
four files.

7. *A body of 8*
files.

8. *A body of 16*
files.

9. *Diodorus Siculus*,
c. 17. 102.

10. *Ælian* c. 17. 102.

11. *Ælian* c. 17. 102.

12. *Ælian* c. 17. 102.

13. *Ælian* c. 17. 102.

14. *Ælian* c. 17. 102.

15. *Ælian* c. 17. 102.

16. *Ælian* c. 17. 102.

17. *Ælian* c. 17. 102.

18. *Ælian* c. 17. 102.

19. *Ælian* c. 17. 102.

20. *Ælian* c. 17. 102.

21. *Ælian* c. 17. 102.

22. *Ælian* c. 17. 102.

4000.

6000. 7000. 8000.
9000. 10000. 11000.
12000. 13000. 14000.
15000. 16000. 17000.
18000. 19000. 20000.

A. Phalanx Ma
cedonian consist
ing of 6000 pike
men.
Phalangarch is
the fourth part
of a Phalanx.

not to be led in a broad-fronted Phalange (because the places are wayes through which you are to march; are sometimes large, sometimes straight, sometimes rough, sometimes plaine, and so you cannot preferre an even front; but must change the forme and disorder it) but in a *Herse* or *deepe Phalange*, which will fit all passages, and in the greatest inequality of way maintain the forme of the battaille entire. And so much of the signification of the words marching in a *Wing* and marching in a *Phalange*.

5. Every thing is called *Parametech*. It is to be observed, that there is a difference between *Parametech* and *Heterometech*: I thought good to note it, because Aelian in diuers places mentioneth both. *Parametech* is the figure, according to Aelian, wherein the length many times exceeds the depth; it may be *Heterometech*, albeit it be but twice as long as deepe. I am not ignorant that *Euclydes* nameth all four sided figures, that haue right angles, and vnequall sides, *Heterometech*. But Aelian, though hee apply *Heterometech* sometimes to the *front*, sometimes to the *flanke*, yet he giues no more then a double proportion either of *front* to *flanke*, or *flanke* to *front*.

6. *Orthion*.] Albeit the word *Orthion* properly signifie things rising in a height, yet in military discourse it is applied to the dimension of the depth of a battell, and not of the length. Here a Phalange is termed *Orthion*, and in *Leon* in the place last by me cited, mention is made of *orthion*, a deepe *embattailing*; and in Xenophon: *orthion*, a Company stretched out in depth; as in *Polyen* also, and *Arrian*, and *Appian*. *Polyen* hath besides, *orthion*, and *orthion*, for an army, that is cast into a great depth and into a narrow front. Therefore, as *Parametech* signifieth the length of the front; so *Orthion* signifies the depth of the flanks of any battell ordered, as is aforesaid. Thus much of the names of the two battels: It remains to shew the Use of them, and how one may be transformed into the other.

The *Plagiophalange*, or broad-fronted battell bringeth most hands to fight with conueniency and therefore is accounted the better forme; and as neere as opportunity of ground would giue leaue, the ancient Generals principally affected, and fought to put this forme in vse: It hath the commodity to ouerfront the aduerser battell, and is safe it selfe from ouerfronting, vnlesse the Enemy bring a greater multitude then you haue to ouer-match your Army. The *Macedonian Phalange* was for the most part of this forme, as all the fields Alexander fought euidently declare; So ordered he his troops at *Granicus*, so at *Issus*, so at *Gaugamela*, so in other places, if the ground would serue. This Caution notwithstanding was obserued, that the depth held proportion with the length; otherwise the length profiteth not so much, as the thinnesse of the depth hurts, by giuing meanes to the enemy to breake through, and put the aduerser battell in a rout. I haue noted it before out of *Leo*.

The *Herse*, or *deepe Phalange*, was thought the weakest kinde to fight in. *Parmenio*, one of the chiefeest Commanders Alexander had, distrusted it (as I haue shewed a little before.) *Cyrus* the elder, in the embattailing of the Egyptians, derided it; yet cannot the forme of the broad-fronted Phalange be so easily taken vp, but that necessity will sometime force the other. In straight places it hath bene often vsed: So *h* *Darius* in the battaille of *Issus*, by reason of the straightnesse of ground, was forced to this forme: So *Bomilcar* the Carthaginian, was faine in a straight place to make a narrow front of his

phalange, and to extend it in depth. And *Acilius Glabius* the Roman Consul, in the streights of *Thermopylae* against *Antiochus*; and *P. Scipio* in *Spain* against the *Illyriens*. Therefore in large grounds the first forme is to be chosen, in narrow and rough places the other. The *Herse* is also fit for Marches, because in a March you are assured to meet with variety of ground; sometimes with woods, sometimes with bushes, sometimes with straight wayes, with riuers, with hills, with pits, with bridges, with ditches, and such like impediments, so that the front of your broad-fronted phalange must needs be dissolved; whereas no difficulty of wayes can hinder the passage of a *Herse*, the front whereof may be narrowed (according to the ground you march in) as you list. *Alexander* being to lead his Army against the *Thracians*, that had planted themselves in the mount *Emus*, was faine to narrow the front of his phalange, according to the way that led vp to the Mount: The same did *h* *Agesilaus* passing through the streights of *Maritima*; the History is by me recited before in my notes vpon the 26 Chapter *Panimen* likewise leading his Army through *Phocis* toward *Thebes*, and finding that the Enemy had taken and possessed a place called *Philobaeton*, that had two streights leading toward it, one of which the Enemy held with a garde, casting his troopes into a *Herse* *orthion*, making the bulke of his Army slender, and fit to march, shaped himselfe to the right hand, as though he meant to hold on to that passage. The Enemy therefore leaning the left hand straight, which they had in garde, ran with all speed to the right hand to stop his passage; but hee taking the opportunity, speeded hastily to the left, and conueyed his Army through without danger. Many like examples of *Herse* accommodated to straight wayes, where a broad-fronted Phalange cannot march, are to be found in Histories. The *Orthiophalange* or *Herse* was also much vsed in an ascent against a hill which the enemy possessed: and in this fence are *orthion* deepe Companies taken in the Greeke writers, especially when a whole Company is put into a file, and 3 or 4 or more files laid together to make an *Orthiophalange*, in which forme they vsed to mount vp against hills. Many examples be in their Histories of beating off Enemies from hills in this forme. *Cyrus* the elder vsed it against the *Chaldeans*; *Xenophon* against the *Carducians*; *Cheriphophus* in passing the riuer *Cernites*, which riuer diuideth the mountains of the *Carducians* from *Armenia*: the *Gracians* against the *Messyngians*, that inhabited certain Mountaines which the *Gracians* were to mount. *Ptolemy* against the *Indians*, that embattelled themselves vpon a mountaine to resist the inuasion of *Alexander*. And a notable example of an Army ascending against a Mountaine, is described by *Xenophon*, in the fourth booke of the ascent of *Cyrus*; He relateth that the *Cholcians* had taken vp a high Mountaine, and there embattelled their Army to the intent to stop the passage of the *Grecians* in their returne out of *Persia*: The *Grecians* at the first ordered themselves into a Phalange, (a broad fronted battell) meaning in that forme to make their way. But afterwards the Chief-taines calling a Court, aduised vpon their best course of fighting: *Xenophons* opinion was, that laying aside the forme of a Phalange, it would be best to order themselves in Companies drawn out in file. For a Phalange, said he, will soon be broken, by reason of the inequality of the way, which in some parts of the Mountaine will be found easie enough, in other hard to ascend. And the soldiers will quickly be discouraged to see the Phalange disordered, in which they march: Besides, marching in a large front,

the enemies, that exceeds in number, will over-front us, and of this multitude to most advantage: In a narrow front it will be no marvaile to see our Phalange asunder with mistine weapons, and with men ordered in battaile to charge ay; whereby the whole Phalange will be distressed. Therefore, as I said, I hold it best to put the Armie into Companies stretched out in depth giving to each Company such distance one from another, that our wings may over-reach the vttermoſt points of the enemies battaile: and let every company make choice of their fittest way for ascent: As for the spaces betwixt company and company, it shall not be easie for the enemy to convey himselfe into them, all the companies on all sides (in case he enter) wrapping him betwixt them: and if it chance that any company be distressed, the next company is to succour and aide it. Now say, that one company attaine to the top of the hill, you may be assured, that no enemy will keepe his ground. This Council was assented to by all. When therefore every man had taken his place, and the 4 companies were laid out in their iust depth, the armed amounted to about 80 companies, in every of which were reckoned almost 100 men: The Targeteers and Archers were divided into three bodies, the first to march without the armed of the left wing, the second without the armed of the right, the third in the midst, every body consisting of well-nigh 600 men. After prayers made to the gods, the souldiers advanced, singing the *Paean*; Then Cheritophus and Xenophon (leading the point of the Grecian battaile) and the Targeteers with them, who over-reached the enemies wings; haisted on a pace, and the enemy perceiving it, extended their wings to meet them, and by that means were distressed some to the right, some to the left hand, leaving an empty space in the middle of their Phalange: the Targeteers armed after the Arcadian manner, led by Aschines the Acharman, seeing the enemies battaile disordered, and imagining them to fly, ranne forth with all speed, and were the first that gained the hill: they were scoured by the armed Arcadians, commanded by Cleonor the Orchomenian. When the Enemy saw them come running on, they forsooke their ground, and began to shift for themselves, one way, another another: The Grecians having gained the Hill, encamped there. Hitherto Xenophon, out of whose practice the best adredresse against an enemy, that possesseth a Hill, ouer which our Army is to march, may be learned: In a broad-fronted Phalange it is hard to proceede, both because of the inequality of the ground, which will easly breake the phalange, and disioynt all the parts thereof, and also for that the enemies weapons throwne from the higher ground will not lightly misse so great a body, and great stones, and other masse, tumbled downe, will beare downe and make ruine of whatsoever cometh in the way, impossible to misse in such an extension of length, and thronging of the Army: to lead in one and a continued Horse is no lesse dangerous: A few men, and those onely in front, shall come to fight against a multitude of enemies, who will over-front and charge them on all sides. Xenophons Council then is to make diuers bodies, and to order them so severed in front and flanke, that they may over-front the enemy, and not be parted asunder with the vneuenesse of the ascent, nor yet proue too faire a marke for the enemies weapons. The Bodies are declared to be Companies each of 100 men; these fo divided one from another in distance silewise, that the vttermoſt bodies on both sides might be able to over-reach the points of the enemies wings, and to make choice of the best Ascent toward the height of the hill. Further, the forme of ordering the bodies is set downe, They were stretched out in depth (ἐν πλάτει ἀνωρτα:) Orthios Iochos is here taken for a Company ordered in one file; and it signifies as much

as *ἐν πλάτει* a Company ordered one man singly after another: which phrase is used by Xenophon elsewhere; and in the same sense Thucydides vseth the phrase of placing ships one in a direct line after another *ἐν πλάτει*, which his Commentaries interpreteth *placere in linea*, having one after another. And Polybius likewise of Ships hath the same phrase, *ἐν πλάτει*, to be placed one after another; and in the same place *ἐν πλάτει*. Yet this passage out of Xenophon, where he mentioneth *ἐν πλάτει*, hath a diuers signification from the common usage of *ἐν πλάτει* amongst other Grecians. It agreeth, in that they led their Companies stretched out in file; it differeth, in that Xenophons files were placed in distance one from another, and had all an equal front in the manner of a *Plagiophalange*, where in the other examples they were ioyned, to the end to make an *orthiophalange*, and in severall bodies to follow one another. I deny not that *ἐν πλάτει* are otherwise taken in the wars of the Romans, described by the Grecians.

So Scipio ordering his battell against Hanniball in the fight of Africa, is reported by Appian to have disposed his Army into Maniples, distributed into three kinde of bodies, the Maniples to stand *ἐν πλάτει*, one directly after another. How they stood Polybius shewes, describing the same battaile: He saith, that Scipio ordered the Hastati and their ensignes first of all the rest, and in front, and gave intervals to their maniples behind them the Principes, not against the internals of the Hastati, as the Roman manner was, but behind them in a right line (because of the multitude of the Enemies Elephants: and lastly the Triarii on the wing of the left flanke he ranged C. Velius with the Italian Horse under him: on the right Massaniila, and all the Numidian Horse, which he commanded. The internals of the first Ensignes (that is, of the Hastati) he filled with the bodies of light armed, commanding them first to undertake the fight; and in case they were not able to withstand the assault of the enemy, or of the Elephants, he willed them to retire; some, that could prevent the rest with speed, through the direct internals of the maniples to the reare of the army; other, that were in a manner surprised, to the flankes, were the Ensignes. This ordering of Maniples one directly after another, so termed and described by Polybius, Appian calleth *ἐν πλάτει*; which notwithstanding; if truly examined, cannot according to the Grecian practice come within the compass of this name. For the Grecians, as I said, drew their Companies severally each into a file; and laying foure, or five, or six, or more of them together, made a body the depth whereof much exceeded the length, or breadth, the front being of 4, 5, or 6 men in ranke, the depth of 100, whereas the Romans, as appeareth by Polybius, kept their ordinary manner of embattailing, seeing that they placed their principes not against the internals of the Hastati, as their custom was, but directly behind the Maniples of the Hastati, to the end the Elephants of the Carthaginians might have an empty and void lane, as it were, to passe through their whole Army: As for the Roman Maniples they consisted of two parts ioyned together, which they called *ordines*, and every *ordo* contained 60 men, commanded by a Capitaine, so that the Maniples had in it 120 men and two Capitaines or Centurions: These 120 men being digested into files, containing 10 men a peece (for that was the length of file, as the depth of the Maniples) make 12 files, which stood one by another ranged in front, not stretched one after another in depth. But because the Maniples of the Hastati principes, and the Triarii, stood directly one after another, therefore Appian called them

The Tactics of Aelian, or

The bringing up
was the last drill.

another in a right line, and by that meanes had 100 in *depth*, and but one in *front*. To bring it therefore to convenient length from this *depth*, the Capitaine commanded the first *file leader* to make *Alte*, or to stand, and the second *file leader* with his *file* to advance, and to *fleece* vp on the left hand and to *front* with the first *file leader*, and to both *files* to stand *even fronted* in open order. The like he commanded the third and fourth *file* to doe; so that the four *files* being laid one to another, and *fronting* equally, the *front* or *length* of the body had foure men, the *depth* 24. Then, because he held this *depth* disproportionable to the *length*, in so small a body, he againe enlarged the *front* by doubling, commanding the *half file* to double their *front*. The *Decadarch* hereupon marched vp to the *front*, and *ranked* with the *file leaders*, and the *half file* following them, *ranked* with the *front-half file* man to man. Now was the *front* eight in *length*, the *flanke* or *depth* twelue. To enlarge againe the *front*, and to make the *length* exceede the *depth*, he commanded the *quarter-files* to double the *front*: hereupon the *Pempedarch*s advanced marching vp with their *quarter files* after them, till they *fronted* with the *file leaders* and *Decadarch*s, and each man of the *quarter files* *ranked* with the rest, so that the *front* came to be of 16 men in *length*, the *flanke* six men in *depth*, and each man in *rank* had a foot and halfe distance, in *file* six foot. And thus the Company from one *file*, as it were from an *Orthiophalange* or *Herfe*, was formed into a long body somewhat resembling a *plagiophalange* or broad-fronted battaile. To reduce it againe to an *Orthiophalange* or *Herfe*, the Capitaine at the entry into the Tent (where the whole Company was lodged together) first directed the first *file* to march out, namely by the *file leader* with his *file*, then the first *Pempedarch* with his *file*, after him the *Decadarch* with his *file*, lastly, the second *Pempedarch* with his *file*; which drawing out of the Officers one after another in *depth*, with the parts of the *file* Commanded by them, immediately brought the *file* to the iust *depth* of 24. This being done, the second *file* followed the first in like order, and the third the second, & last of all came the fourth: and this was the manner of changing one forme into another: and albeit the example be but of a Company, yet is the reason all one in a *Phalange* or battaile; for as a company is compacted of many *files*, so is a *phalange* of diuers companies; and as one *file*, in the example before, was led after another *filewise*, so is, or may one company or other body be led after another, making thereby an *Orthiophalange* or *Herfe*: and as one *file* advanced to front with another to the intent to alter the forme of the *Orthiophalange*, to must the bodies or companies *fleece* vp one by another to make a *plagiophalange* or broad-fronted battaile, yet want there not Examples in the Greeke History of turning the *Orthiophalange* or *Herfe* into a *plagiophalange* or broad-fronted battaile, and by consequence the *plagiophalange* into an *Orthiophalange*. *Cherisophus* in the returne of the 10000 *Grecians*, that followed *Cyrus* the younger into *Persia*, had the leading of the Vant-gard all the way. * He in his march in Armenia perceiving the *Chalybes*, *Tauchians* and *Phasians* had taken certaine mountaines, over which the *Grecians* were to passe, made alte some 30 furlongs before he came to the Enemy, lest encountering with the enemy, hee should fight with his army being led in a wing or *Orthiophalange*: He commanded therefore the Capitaines that followed him with their companies, every one after another to *fleece* vp their companies by his, so the intent to cast the army into a *plagiophalange* or broad-fronted battaile. When these Commanders were come vp, hee called a counsell to advise of the best

* Xenoph. de rep. 4.34.

† Xenoph. de rep. 4.34.

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course proceeding. Here is the order of the *Grecians* march expressed to be in a *Herfe* or *Orthiophalange*, which consisted of many companies one following another; and likewise the manner of transfiguring the *Herfe* into a broad-fronted *phalange*, viz. the Capitaines one after another *fleece* vp their companies by *Cherisophus* his company on the left hand, and making an equall front with him. And yet this example containeth no more, then the *fleece* vp of the Companies upon one flanke. *Cherisophus* first made a Stand with his company, hauing the vant; the following Capitaines *fleece* vp their companies on his left hand, as the *files* did one after another in the other example. * Alexander vied another kinde of *fleece*ing a little before he fought the battell of *Iffos*; For, causing the vant-gard first to stand, he commanded the rest of the foot to march vp to the front of the vant-gard on either flanke. The words ly thus in *Arrian*. Alexander hauing by midnight gained the *Streights* of *Cilicia*, setting out a *streight watch* upon the rocks, rested, and refreshed his army till morning: by day-breake he descended from the *streights* in the ordinary way, and as long as the passage was narrow, he led in a wing; afterwards the mountaines opening a greater distance, he enlarged his wing into a *phalange* by little and little still *fleece*ing vp the armed, one body after another to the front; on the right hand toward the mountaines, on the left hand toward the Sea. The *Herfe* all this while marched after the foot; but coming to ground of larger capacity, they were ordered on the wings. This manner of working to make a *phalange* out of *Herfe*, was by drawing the following companies vp on both flanks, on the right toward the mountaines, on the left toward the sea; so that it differeth from the other forme wherein the Companies were *fleece*d but vpon one hand. A third way of making a *Plagiophalange* of a *Herfe*, I finde in *Polybius*, *Machanidas* the *Lacedemonian* Tyrant (saith he) being to fight with *Philopemen* the *Achaean* Generall, who had stationed his army into a broad-fronted *phalange*, made *Comblance* as first, as though he meant in a *Herfe* to charge the right wing of the Enemies battaile; but approaching nearer at a convenient distance, he brake off the hinder part of the *Herfe*, and facing it to the right hand marched out, and led it out in *length*, and ioyned it in equall front with his right wing, thereby equalling the left wing of the *Acheans*. In this manner of transforming the *Herfe* into broad-fronted *phalange*, the companies or bodies follow not one another, to *fleece* vp to the front, but halfe the *Plagiophalange* is broken off at once (the reare halfe) and facing to the right or left hand, is led vp and ioyned in an euen front with the other halfe, not vnlike to our *viagein* exercise, when we command our middle men with their halfe *files* to face to the right or left hand, and marching out to double the front of our battaile. Thus much may suffice for the names, use and reduction of one of these two *Phalanges* to another: The third *Phalange* mentioned in this Chapter followeth.

7 The *Phalange Loxe*.] There are two kinds of *Loxes*, or *euene* fronted *Phalanges*: The front of one is figured in a continued right line stretched out bias-wise thus: The other hath as it were two fronts, formed out of two feuerall parts of the *Phalange*; the one advancing against the Enemy to begin the fight, the other staying behinde, and keeping the first ground, being ordered without the flanke of the first, that vpon occasion it may likewise advance, and ioyn, or else retire from the Enemy, and giue backe; the figure shewes the shape of it: the last hath bin vied by great Generals

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nerals as a *forme of advantage in fight*. The first note to win a passage, as I take it, over a river, or such like (where the broad-fronted *Phalange* could not passe) and to bring the Army to a ground, where it might be ordered in better forme for fight. I will give one Example (for I read not many) of the first; ^a *Alexander having conuied his armie over Hellespont, and enired into Phrygia, came as farre as the river Granicus. Three Lientenants of Daries with 20000 Horse, and well nigh as many foot, had embattell'd themselves on the other side of theriver to hinder his passage. The river was full of depths and shallows, some what dangerous to enter, and the banks on the further side high, rough, and steep; besides, the Enemy was ready with horse cast into a long or broad-fronted phalange, and with flocks of foot to beat him backe, that should offer to clymbe the banks. Alexander being resolu'd to passe over, first ordered his troopes in a broad-fronted phalange. The right wing he commanded himselfe, and gave the command of the left to Parmenio; then putting the Scout before with the Pæonians into the river, and after them a Phalangarby of foot led by Amyntas the sonne of Arrabius, and then Prothomy the sonne of Phillip, who commanded the troopes of Socrates, which troope had the Vanguard of all the horse that day, himselfe with the right wing eured the river (the Trumpets sounding, and the Army giving a shout) extending full his battell himselfe against the Stream (αὐτὸν ὑπὸ τοῦ ποταμοῦ, μετὰ τὴν ἰσχυρίαν) to the end the Persians might not fly upon him, as he led in a wing, but himselfe, as much as was possible, might come to come with them, having the front of his phalange extended in length. The Persians cast ^b Darts from the high ground against the troopes of Amyntas and of Socrates, as they approached to the further banks, and some of them, where the ground was more even, defended to the brinke of the river; so there was thrusting and shulderting of Horsemen, some to ascend out of the river, some to hinder the ascens. The Persians let flye many a dart, the Macedonians fought with speares: The first Macedonians that came to hands with the Persians, were cut a peece fighting valiantly, save only those that retired unto Alexander, who was now neere advanced with the right wing. He himselfe first of all charg'd the Persians, where the principal strength of the whole body of their horse and the Generals of the field stood; about him was a strong fight, and in the meane time one troope after another pass'd easily over the river. This passage of the History is long, and therefore I forbear to recite the rest, only I adde, that after a long fight the Persians were forced to flye, and the victory remained with Alexander. And this, that I have recited, may serve to shew the use of this kinde of *Lexe-phalange*, which was practis'd by Alexander to no other end, then to *gaine the passage of the river*; for in this forme he would never have fought, nor is there any president for it out of his batkels, ranged vpon even ground, where he might have chosen the forme he liked best; but hee he was to get over a river, the enemy held the banks on the other side with 20000. Horse ordered in a broad phalange; the river was full of shallows and depths and thereby hardly passable; the banks on the other side deepe and broken, and hard to ascend: Parmenio dissuaded him to lead in a wing or horse, and himselfe had no great fancie to adventure in that forme. In a broad-fronted phalange he could not, which must needs have beene broken by the unequal footing in the bottome of the river? What did hee then? hee thought best to choose a passable foord, and through it to put over the right wing of his Army phoe-wise toward the further bank, whither when they came, they should proceed against the stream; that the front being ill extended, and the rest coming vp and ioyning, he might front toward and charge*

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charge the Enemy *phalange-wise*. And that this was his meaning is plaine by ^a *Polyen*, who rehearsing the same Stratagem, saith, that Alexander led his Army in that forme along the further bank to the end to over-front the *Bænes* Horse-battaille: So that this kinde of *Lexe* or *uneven-fronted Phalange* is no forme to fight in, as I conceiue, but hath bene sometimes taken vp, as a meanes to attaine to a ground fit for a better forme; as Alexander changed it as soone as he came to the banks of the river on the other side.

The other (as I said) great Generals have used, and by it have gained great victories. I will adde an example or two, whereby the use of it may more clearly appeare: Epaminondas the Theban in a field against the Lacedæmonians, gained a famous victory by this forme: ^b *Diadorus Siculus* writeth thus, The Bæotians also being ready to fight, the battalles on both sides were fashioned in this order: Amongst the Lacedæmonians the Chiefestates of the race of Hercules had the wings (viz. Cleombrotus the King, and Archidamus, who was the sonne of Agefilaus, the other King.) On the Bæotian side Epaminondas using a peculiar and choice kinde of embattailing, obtained a renowned victory by his martiall skill: For selecting the best men out of all his troopes, he oppos'd them against one of the Enemies wings, himselfe resolu'd in his owne person to try the fortune of the day with them. Against the other wing he set the weakest commanding them to fight retreating, and to give ground by little and little, when the Enemy came on to charge; framing therefore an uneven-fronted Phalange, he determined to hazard the fight with that wing, which consisted of his chosen Soldiers: The Trumpets sounded, and the Armies gave a shout, and the Lacedæmonians figuring a halfe Moone thrust out both their wings of purpose to enuiron the Bæotians, who with one of their wings retired, with the other ran forth to ioyne with the Enemy: after ioyning, the Victorie being a good while doubtfull thorough the valour of both parties, notwithstanding Epaminondas by the manhood of his people, and the thicknesse of his battaille, having the better, many of the Lacedæmonians fell; for they were not able to endure the weight of the resolution of those chosen men, yet so long as Cleombrotus lived, and had many to ioyne targets for his defence, and ready to dye before him, the issue of the victory was uncertaine: But after he had cast himselfe into all kinde of dangers, and yet could not force the Enemy to retire, fighting heroically he was borne to ground with many wounds, and so ended his daies: There arose a flocking and concourse about his body, and multitudes of dead men were heaped one upon another. That wing, being now without a Commander, was hardly laid to by Epaminondas, and first with plaine force somewhat disordered. The Lacedæmonians on the other side, brauely bazarling for their King, recovered his dead body, but could not attaine to the victory; as also the selected band, albeit provoked by the vertue and exhortation of Epaminondas, it used extraordinary valour, yet with much adoe did it force the battaille of the Lacedæmonians, who first giving backe, somewhat disordered themselves; as last many falling, and no man being to command them, the whole armie took it selfe to flight. Epaminondas his soldiers followed the chase, slew many, made them themselves Masters of the field, and carried away a notable and famous victory. Their honour was the more, because they fought with the most valiant men of all the Grecians, and overcome them being many more in number then themselves; contrary to all mens expectation; but of all other Epaminondas was the man that merited most praise, who by his owne valour and martiall skill, won a battaille against the Generals of Greece, which to that day were held invincible. This Testimony of the *Lexe-phalange* is somewhat long, but the worthinesse of the circumstances will, I hope, beare me

^b *Diad. Sic. l. 5.*

The Lacedæmonians had by Archidamus Law two Kings at once.

^c *Epaminondas.*

^d *Epaminondas.*

^e *Epaminondas.*

^f *Epaminondas.*

^g *Epaminondas.*

^h *Epaminondas.*

ⁱ *Epaminondas.*

^j *Epaminondas.*

^k *Epaminondas.*

^l *Epaminondas.*

^m *Epaminondas.*

ⁿ *Epaminondas.*

^o *Epaminondas.*

^p *Epaminondas.*

^q *Epaminondas.*

^r *Epaminondas.*

^s *Epaminondas.*

^t *Epaminondas.*

^u *Epaminondas.*

^v *Epaminondas.*

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of ordering them in the *flanks*: Besides, when *Ælian* saith, they are placed *sub eis alijque* the *quarriers*, vnder the *wings* of the battell, he sufficiently expreth himselfe, the *flanks* of the battaile on both sides being the vttermost parts of the *wings*.

The Use, and aduantage of these exercises of Armes.

CHAP. XXXIV.

THese precepts of turning about of faces, of *wheeling*, and *double wheeling* of the battaile, and of reducing it to the first posture, are of great vie in (1) sodaine approaches of the Enemy, whether he shew himselfe on the right or left hand, or in the reare of our march. The like may be said of *Counter-marches*, of which the *Macedonians* are held to be the inuen-

ters of the *Macedonian*, the *Lacedemonians* of the *Lacedemonian*, from whom the Appellations are accordingly drawne. The Histories witnesseth, that *Phillip* (who much enlarged the *Macedonian* Kingdome, and ouer-came the *Grecians* in a battaile at *Cherones*, and made himselfe Generall of *Grecia*) and likewise his Sonne *Alexander*, who in short time conquered all *Asia*, made small account of the *Macedonian counter-march*, vnlesse necessity forced it; and that by vse of the *Lacedemonian*, they both became victorious ouer their enemies. For the *Macedonian counter-march*, the Enemy falling vpon the reare, is cause of great disorder, in as much as the hindermost marching vp to the front, and making shew of running away, it more encourageth and emboldeneth the Enemy to fall on, for feare and pursuit of the Enemy is ordinarily incident to this *Counter-march*: but the *Lacedemonian counter-march* is of contrary effect; for when the Enemy shewes himselfe in the reare, the *file-leaders* with their followers brauely aduancing, and opposing themselves, it striketh no small feare and terror into their mindes.

NOTES.

ALL the four motions of a battaile; Facing, Counter-marching, Doubling, and Wheeling, are before handled: In this Chapter *Ælian* briefly rehearseth the vse of them, especially in

1. Sodaine approaches of the Enemy.] If the Enemy come sodainely vpon vs, he must direct himselfe either against our front, or our reare, or our *flanks*. If against our front, we neede no other motion then that whereby we may strengthen our front, which is usually done by doubling of ranks; we march for the most part in a *hedge*, in which forme there cannot come many hands to fight: and that is the reason why it is accounted the *weakest* forme to ioyne with the Enemy. ^b Doubling of ranks helpeth that defect, and bringeth as many hands to fight, as the proportion of forces will allow: If against the reare, and time strenght you not, and your battell be in open order, you haue the vse of ^c counter-march, which bringeth the best hands to fight; for the *File-leaders* are esteemed the flower of the Army: your battaile being in order or close order, you are to ^d wheele it about to your right or left hand.

^a Against the front.

^b Doubling of ranks.

^c Against the reare.

^d Counter-march.

^e Wheeling.

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hand, and so to oppose the front against the Enemy. But in both these motions the caution of *Ælian* is, that the Enemy surprize you not whilst you are in the action of counter-march or wheeling, lest taking his aduantage, he charge you being in disorder. Therefore if he come so neere, that you haue no liberty to counter-march or wheele, you only refuse to ^a face about to the right or left hand, for so he shall not be able to giue vpon your backe: If the enemy appeare vpon any *flanke*, counter-march of the Front will not auail, much lesse doubling against the *flanke* of ranks, or files, but you must either wheele your Front to the *flanke*, or if you haue not time enough fo to doe, you are to face your battell to that hand: The vse of these motions hath been handled in their severall Chapters more at large.

Of the Signes of Direction which are to be giuid to the Army, and of their severall kinds.

CHAP. XXXV.

(1) E are to acquaint our Forces both Foot and Horse, perfectly with the (2) voice, and perfectly with (3) visible signes, that whatsoeuer is fitting, may be executed and done, as occasion shall require. (4) Some things also are to be denounced by the *Trumper*: for so all directions will be fully accomplished, and sort to a desired effect. (5) The signes therefore which are delivered by voice, are most euident and cleere if they haue no impediment. (6) But the most certaine and least tumultuous signes are such as are presented to the eye: if they be not obscured. The voice sometime cannot bee heard by reason of the clashing of Armour, or trampling or neying of Horses, or tumult of carriage, or noise and confused sound of the multitude. The visible signes also become many waies vncertaine, by thicknesse of ayre, by dust, by raine, or snow, or sunshine, or else through ground that is vncuen or full of trees, or of turnings. And sometimes it will nor be easie to find out signes for all vses, occasions circumstances presenting new matter, to which a man is not accustomed: yet can it not fo fall out, that either by voice, or by signall, we should not giue sure and certaine direction.

NOTES.

THe ordinary motions in a Phalange are all represented by *Ælian*. Now commeth hee to speake of Signes, which direct, and are meanes effecting all these motions, and without which the Army is no Army, but remains a body vngouernable, and may aptly be resembled to a Shippe that hath no rudder: For as a Ship in a tempest is driuen by all windes, tossed by waues, throwne euery way vpon rockes, vpon sands, vpon dangerous shoares, that is not guided by the Master, who standeth and moueth at the helme, So an Army not directed by signes, and forecaust of the General is carried away through ignorance and violence of affection, sometimes of anger, sometimes of feare, sometimes of reuenge, and other vnbridled desires, and breaketh or else fall

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seth into confusion through disorder, working little against the enemy, nay rather giving him means of a certain victory. The Shippe is like the Army, the Generall like the Master, the words of Direction like the Rudder, guiding all and every motion of the Army. For the Army being a body of many heads, whereof every one hath a severall sense, hangth together not by the naturall coherence and knitting of one member to another, but by artificiall ioyning of man to man, file to file, body to body, whereby it is gathered together into one Masse, and figured into many members and ioynts, and ruled not by the reason and judgement of it selfe, but by the reason and understanding of the Generall. So that no man is to demand why this or that is commanded, but is to execute it alone for this cause, because it is commanded: The Generall then being to Command, and direct the actions of the whole Army, ought to finde out means to speake and discourse with them all at once, in such a language, as it were, that all may understand at once. For the occurrence of warre being oftentimes sudden, and once slippt by, irrecoverable, require sudden means of speedy direction, that nothing fall out for vnlooked for, but the Army may have notice how to prevent and avoid, or else to turne it to their most advantage; the rather because in warre, safety and life come in question, in losse of which, no pardon of negligence can be admitted. And seeing there are two principall fences of aduertisement, the eare the one, the other the eyes, the eare to heare all manner of sounds, the eye to discern all manner of colours and shapies, it hath been the witty inuentions of ancient Generalls, to informe their Armies by the one, and by the other, by the eye when there was no vse of the eare; by the eare when the eye could not be informed: The true obseruation and vse of these signes auaille much in warre. Vegetius saith, that nothing prospereth more to victory, then to obey the admonition of signes. Former experience hath taught, that the neglect or error of signes, hath brought in great inconueniences, and quite ouerthrowne the enterprises in hand. Polybius remembereth it in Aratus the elder, a Generall of the Achæans, Cratus, saith hee, the Generall of the Achæans, seeking to get the Cynethian City by a plot, agreed with those of his party within the Citie, upon a certain time to come by night to the riuier that runneth by Cynethic, there refreshing and staying his Army a while, and that those within taking their time, should send about midday out of the gate secretly one of their companions, to stand in a cloake by a hill appointed, which was not farre from the Citie, to giue aduertisement to Aratus to march on; and that the rest about that time should lay hands upon the Polemarches, that vsed to guard the gates, while they reposeth themselves, and slept: And that this done, the Achæans should with all speed hasten to the gates, out of their ambush. These things concluded, and the time approaching, Aratus came accordingly, and hiding himselfe by the riuier, awaited the signall: About the fifth houre, one of the Citie an owner of the pe, that bore extraordinary fine wooll, & were usually feeding about the Citie, came out of the City gate in a cloake, desirous to speake with the shepheard about some private business of his owne, and standing upon the same hill, looked round about for the shepheard. Aratus and his folke imagining this to be the expected signall, ran in all hast toward the Citie: but because nothing was ready within, the gates were quickly shut, and not only Aratus missed of his purpose, but the Citizens also that conspired with him, fell into great misfortunes, being taken with the manner, and presently brought forth and put to death. This may be an example of error and misprision of the sign: Of the neglect, and likewise of the like error and misprision, there is a notable example

* Veget. l. 3. c. 5.

b Polyb. l. 9.
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example in *Cæsar's* Commentaries in the siege of *Alexia*, where *Cæsar* having won the *Enemies* campe, lying upon a hill neere the *Towne*, sounded a retreat to his army that was in fight: the *Ensignes* of the tenth legion made a stand, but the *Souldiers* of the other legions not hearing the sound of the trumpet, by reason of a valley, beyond which they were; were yet held backe by the *Tribunes* and *Legats*, as *Cæsar* had giuen direction. Notwithstanding, being pushed up with the hope of a speedy victory, and with the sight of the *Enemy*, and their happy battailes of former times, thinking nothing so hard that it might not be achieved by their valour, they made no end of their chase, till they came neere to the *Wall*, and *Gates* of the *Towne*; and some of them entering at a gate, other some climbing up the wall, imagined they had gotten possession of the *towne*. In the meane time the *Enemies* force, whowere busie in fortifying without on the other side of the *towne*, being acquainted herewith by message, sent their horse before, and followed after themselves, and in great numbers charged the *Romans*: The fight was hard, the *enemy* trusting to the advantage of the place and to their number, the *Romans* to their valour, when on the sudden were scene on the open side of the *Romans* the *Heduan* Horse who forced in *Cæsar's* *Archie*, and were by him sent on the right hand to get up the hill another way: they by likewise of their armour put *Cæsar's* *souldiers* in a great feare. And although it might easily be discerned, that their left shoulder was unarmed, which was the signe of such as were friends; yet the *Romans* conceived them to be enemies, and to use that device onely to over-reach and entrap them. Being oppressed on all hands, and 46th *Centurions* slain, they were beaten from their ground with the losse of few lesse then 700 men. *Cæsar's* *Souldiers* here offended in both kinds in the neglect of their Generalls Command, which he gaue by signe, and in mistaking the signe, which was vsuall for the *Heduns* to be knowne by. *Cæsar's* iudgement of these two fautes appeareth in his speech, which he made to his Army presently upon the losse, in which he reprehended their rashnesse, in that they would needs take upon them to iudge how farre they were to procede, and neither be held in with the signe of retreat that was giuen, nor yet be commanded by the *Tribunes* and *Legats*. He shewed of what force the disadvantage of ground was, and what his opinion was before this time at *Aquaricum*, where surprizing the *Enemy* without a Generall and Horse, he let an assured victory slip out of his hand, because he would not hazard, nor yet a small losse in fight upon inequality of ground. As much as he admired their brave mindes and resolution, whom neither the fortifications of the *Enemies* Campe, nor the height of the *Mountaines*, nor the wall of the *Towne* could hold backe; so much he reprehended their presumption and arrogancy, in that about the victory and issue of things, they preferred their owne conceits before the opinion of their Generall: For his part he required aswell modesty and continencie in a *Souldier*, as valour and magnanimity.

So *Cæsar* in insinuating that obedience and heedfulness were two principall vertues in a *Souldier*; by the one to be ready at all commands, by the other to execute with discretion what was commanded: by want of heedfulness they perceived not the signe of retreat which was proposed vnto them, and mistooke the marke of the *Heduns*, whom they esteemed for their foes; by want of obedience to their Officers, they incurred the danger and losse which they sustained: diligent care therefore is to be had of signes, by which the minde of the Generall in all directions is declared, and as it were set before the eyes of the whole Army.

The Inuentors of the Signes of Warre were many. The *Ensigne* was inuented by the *Egyptians*, as I haue shewed in my notes vpon the 9 chap. of this Booke,

* Cæsar de bell.
Gall. l. 9. 556.

* Three were 60
Centurions in a
Roman Legion.

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Booke, where also the reason of the invention is giuen: The order of an Army, the giuing of the *signe*, the *watch*, the *warthword* was inuented by Palamedes, the *trumpet* by Terrenceus the Sonne of Hercules.

To giue *signes* to an Armie pertaineth, as I haue shewed, to him that is the Governour thereof, that is, to the Generall. The manner how *signes* were by him giuen, appeareth in * *Onsander*. I will recite his words: *Let all signes, quoth he, (he meaning by voyce) and by signes be delivered to the Officers of the Armie; in as much as for a Generall to goe up and downe, and proclaime the signe to all, is the part of an vnwise and vnexperienced man, and both time is lost in denouncing it; and it is often a cause of humilitie, whilst every man asketh what the signe is. Besides, one addeth something to the Generals words, another diminisheth them through ignorance.* * *Leo* hath almost the same wordes, at least the same sense, and as I take it, hee borroweth them from *Onsander*. * *Onsander* addeth, *it becometh him to giue the word to his highest Commanders, who are to deliver it over to the next to themselves, and they to their next inferior Officers, till it come to the last; for so shall every one speedily, decently, and quietly know what is commanded.* And this was the manner of the Grecians, as may appeare by *Thucydides*, who describing the vjage of the Lacedemonians in giuing the word and *signes*, of direction, hath thus, *And presently the Lacedemonians ordered themselves in battaile, Agis the King commanding, as their Law is; for when the King leadeth, all things are under his command, and hee giueth direction to the Polemarches; they to the Leuchag; who deliver it to the Pentecosters, and they to the Enomotarches, from whom the Souldiers of the Enomoties haue it.* This was then the manner of the Grecians. How the Romans did deliver out their word you may finde in the first Booke of * *Polybium*. But because it pertaineth not to Ælian, who intreateth of the Grecian discipline alone, I remit the Reader to my marginal quotation. The *signe* was then delivered from the superior Officers to the inferior, and from them to the Souldier: the kindes of *signes* that were delivered are reckoned vp in this Chapter, being in number two; for they were presented either to the *ear* or to the *eye*; to the *ear*, as all sounds, whether mans *voice* or *trumpets*, or other instruments of *warre*, which were presented for direction or motion of the Army. To the *eye*, as all *mute signes* (so they are called which haue no sound) which were set vp to the view of the Souldier for direction likewise: Both of these kindes were either *ordinary* or *extraordinary*; *ordinary*, which had daily vfe in the Army, as the *Trumpet*, *Ensignes*, and such like, as serued for ordinary direction. *Extraordinary*, which were brought in as occasion was offered of new command: besides, some were delivered *openly*, as the *vocal*, *femiucall* and *mute signes*, which by proclamation, sound of instruments, or representation were set forth to the whole army at once; some *privily*, as the *word*, and such like, which passed secretly from one to another, and were receiued priuately in the *ear*. This variety was inuented, that in case one kinde failed, or would not serue, another might, as I haue noted before out of *Strabus* vpon the ninth Chapter, and as Ælian teacheth in this Chapter.

The ends of *signes* are two, one to order and direct our *owne forces*, the other to distinguish them from the *Enemy*.

Because I haue before spoken of the diuersity of *vocal* and *mute signes*, it shall not be amisse here to shew the vfe of them both by examples.

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And this is first to be noted, that the *Grecians* in gouerning their troopes, as much as they could, retained the vfe of the *voice*. In publike directions they vfed the *voice* of the *Crier*; I haue before noted it vpon the 9 Chapter. If the command required *secrecy*, the Generall gaue it to his chiefe Commanders *secreely* by word: Of this kinde was the *signe* delivered to *discreet* enemy from his owne souldiers in a battaile to be fought. * *Xenophon* writteth, that at such time as *Cyrus* the younger and *Ariarxes* were to ioyne battaile, *Cyrus* sitting on horse-backe a pretty distance from the Grecian troopes, heard a murmuring noise running along through their whole battaile, and asking *Xenophon* (who was then present with him) what noise it might be, and what it meant, *Xenophon* told him, that the Word was now giuen the second time: Hee wondering who had revealed the Word to the Enemy, desired to know what the new word was; *Xenophon* answered, it was *Iupiter* the Saviour and victory; which new arose out of the deliuering of the *signe* of the battaile, which being delivered to the inferior Officers by *Glearchus*, the chiefe Commander of the Grecians, and the Officers communicating it to the Souldiers, and the Souldiers one to another, went thorough the whole body of the phalange with a soft and still noise of them, that whispred it in the eares of their companions. *Xenophon* hath here set downe, that the word was *Iupiter* the saviour and victory; In * another place he hath, *Iupiter* the Saviour and *Hercules* the guide, for the another demanded the *signe*; if they deliuered the word giuen by the Generall, they held them for friends, if otherwise, for enemies: * *Polyen* telleth of an *Arcadian* Generall, who commanded his Souldiers to kill him, who fewer he were that should aske the word: so that he made the voice of the enemy serue for the word to his owne Souldiers. This *signe* was changed in euery battaile, lest, if still the same *signes* were vfed, the Enemy might happily come to the knowledge of them, and so be taken for friend, vnder colour whereof much treason might be wrought: not much vnlike the *signe* giuen in a battell to be fought, is the *watch-word* by night, which was vually delivered to the first Officers of the Army, and by them deriued to the rest, and so brought downe to the Souldiers, and was no lesse obserued in a Citie, then in the Campe; in both which the same forme of watching was held, saue that in a Campe there were *Sentinels* per due, as we terme them at this day (the *Grecians* called them *perdue*) who stood and watched without the trench of the campe; whereas the Citie for the most part had *Sentinels* watching only vpon the wals or market-place, or other pieces of strength giuing to, and receiuing the word from the rounders. And as the *signes* of battaile varied vpon occasion, as the last example specified, so the *watch-words* were often changed, for feare they might come to the notice of the enemy; for the Enemy hauing the *Watch-word*, might nourish spies in our Campe or Citie, and haue certaine intelligence of all that passeth there, as being taken for friends, because they carried the *marke* and *tokens* of friends; and they were changed not only at the reliefe of the watch, which time is the vusual moment of varying the word, but oftentimes after the same night, for feare that a *Sentinell* might be snatched vp without the Campe by an enemy, or else because of treason within, in revealing the word to the enemy; oftentimes also to they gaue a double word, one to the *Sentinell*, another to the round; and some-

* *Onsander* c. 5. 5.
* *Onsander* c. 5. 5.

* *Leo* c. 50. §. 2. 8.
* *Onsander* c. 5. 5.

Polemarches.
Leuchag.
Pentecosters.
Enomotarches.
Xenophon c. 19. §. 2. 8.

* *Polyb.* l. 1. c. 7. 7.
Lysimach of *Polyb.*
l. 1. dial. 9.
Veget. l. 3. c. 5.

Sign. Vocalis.
Sign. Femiucalis.
Sign. Muta.

Sign. Vocalis.

* *Xenophon* c. 19. §. 2. 8.

* *Xenophon* de equis.
l. 6. §. 2. 8.

* *Polyen* l. 1.

* *Onsander* c. 5. 5.
* *Polyb.* l. 9. §. 2. 8.

some-

1. Ensigne. 1. 1. 1.
For the double
signe and by
signe, 1. 1. 1.
1. 1. 1. 1. 1. 1. 1. 1.
1. 1. 1. 1. 1. 1. 1. 1.
1. 1. 1. 1. 1. 1. 1. 1.
1. 1. 1. 1. 1. 1. 1. 1.

The Tacticks of Aelian, or

sometimes added a *mute signe*, to the words, which kind they called *signes*, as it were *aby-signes*; and these are all the *secret signes by words*, which I finde in the Grecian practice. For the other words, as the exhortation of the General to the Army, and the words of training deliuered by the Cryer to the Souldiers, (for every Company had a Cryer, because his voice was stronger and louder then the Captaines,) they neither are secret, and seeme rather to be in the nature of Commands, then Signes. The single word of *tell and watch*, I find to bee called by no other name then *tribuna*, if it were a double word *tribuna tribuna*, if a mute signe were ioyned to the word *tribuna*.

The voice then of a man was vied for a signe either when secretie was required, or else where the Crier might bee heard in discharging his duty by proclamation, because it was wake and could not extend to the hearing of the whole Army, and many things required for publike and quicke direction, Instruments of sound were brought in. *Vegetius* saith very well, *Because a multitude cannot be governed by voice alone in the tumults of fight, and because many things are to be commanded and done, according to necessity, the ancient use of the Nations found out, how the whole Army by signes might with speed have notice of, and follow that, which the General iudged profitable for it.* To helpe therefore the weaknesse of the voice, Instruments of sound were brought in, which were of three sorts amongst the *Grecians*, the *Trumpet*, the *Flute*, and the *Harpe*. The *Flute* was vied by the *Lacedemonians* the *Harpe* by the *Grecians*, (even to the ioyning of battaile) all other *Grecians* vied the *Trumpet*. And yet in the battaile during the time of fight, and in retreats, the *Lacedemonians* also vied the *trumpet*. I haue noted it before vpon the 3 Chapter, where I haue also touched in what occasions and actions the *trumpet* was the signe. Now will I give some Presidents of the particulars there remembered.

And first the *Trumpet* gaue the signe of removing the Campe, which appeared by this precept of *Leo*, *When you will remove your Campe without tumult, you are to giuen commancement ouer night.* And againe, *The first day, in which you remove, you are in the morning by day light to signify the remove by sound of the Trumpet three times, and then remove, and the Leaders and the armed are to goe out first, then the wagons, if any bee, and then other things which are carriad for the use of the Army.* Thus *Leo*, for the remove by day. By night, the Army of the *Grecians*, that fought with *Antiochus* (as *Xenophon* reporteth) removed after this sort. After the death of *Cyrus*, the *Grecians*, that followed *Cyrus*, being in distresse, and pinched with want of all things, not knowing what course to take, and hauing a messenger from *Arius* (a chiefe *Persian* Commander) under which he liued, to come and ioine with him, that they might returne together to *Ionia*, from whence they first began to march, *Clarchus* the *Principall* Commander of *Grecians* being determined to doe as *Arius* counselled, and yet loth the enemy should know of his departure, gaue these directions to the Army, *As his must be your course, saith hee, we must goe every man to his lodging, and sleep vnder such پوشان as he hath, and when the Horne giueth the signe to rise, trusse up your baggage, as the second signe lay it vpon the carriers beasts in the third every man follow his Leader.* The Captaines and Corone's bearing this, did as they were commanded. This practice of *Clarchus* his direction not much from *Leo's* precept; for hee vied three sound of the *trumpet*, and so *Leo* doth command: *Clarchus* yet further sheweth what was bee done at that time, which *Leo* pretermitteth, perhaps as a thing commonly knowne; *Be-*

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sides, *Clarchus* vied all these signes for another end, then for which they were first instituted. The *Grecians* at evening discharged their workmen from their worke by sound of *trumpet*, and that was called the signe of rest; then they diuided the night into foure parts, which were called foure watches, because their *Sentinels* were foure times releueed in a night, and at euery reliefe the *Trumpet* sounded. Now the sounds of the *Trumpet by night*, *Clarchus* converted into signes for marching according to *Leo's* prescription, and removed his Campe, the enemy not perceiving it. Hence it appeareth then that the Campe was removed by the sound of the *Trumpet*. And yet I finde that *Alexander* brought in an alteration about this signe of removing: For *Curius* remembereth that *Alexander* at the first vied it, but perceiving afterwards, that this signe could hardly be discerned by the whole Army, by reason of the noise and stirring of the multitude, thought it better to sticke downe a Pole, and vpon the top of it to hang a coloured cloth, to giue his Army notice, that hee meant to remove, and euer after held himselfe to that signe.

The *Trumpet* likewise was the *signe of fight*: And when all the *Trumpets* of the Army sounded, it was called *et* *trumpetum*, (in Latine *Classium*), and the whole Army hearing this signe, began to aduance, and sung the *Pæan*, and gaue a shout, and presently ioyned with the enemy. The *Grecke* histories euery where giue testimony hereof.

But we are to note that this sounding of *trumpets* all together, was before the Army came to ioine with the enemy, and that the end of it was to strike a terror into the enemy, and to encourage and stirre vp the mindes of their owne people to fight, for in the time of fight, they vied another manner according to this precept of *Leo*, *I would not aduise you to sound with many Trumpets, during the time of conflict, it being a thing both hurlyfull, and bringing with it tumult and confusion: for thereby no Commander can bee heard. But if the place bee found plaine and open, the Trumpets of the middle battell will bee sufficient for all the other battels: if it be uneven, or the winds as it often happeneth, bolster, or the noise of waters hinder the cleernesse of the sound, it will not bee inconvenient for a Trumpet to speake in euery battell, so that there may be sounded in the whole Army. For the more that stinnesse is observed, the lesse shall the younger sort of Souldiers be disturbed, or the beasts affrighted, and no veremill shall the battell seeme to the enemy, and directions be better heard and put in execution.*

The *Trumpets* were therefore the signes of fight, first all sounding together when the Army went to charge, and afterward one or three at the most during the time of fight.

And as the signe of fight was giuen by the *Trumpet*, so was the signe of retreat.

This also is manifest by the stratagem of *Pammenes*. *Polyen* relateth that hee & *Polyen*, in *Pammenes* deceived his enemies by using a contrary course in sounding the *Trumpet*, then the common manner was, commanding his Souldiers when hee sounded the retreat, they should goe to charge, when hee sounded a charge they should retreat: in doing whereof, he greatly annoyed his enemies. The example of *Agessilas* cited by mee in my notes vpon the 9 Chapter sheweth, that the *trumpets* was vied for retreats. And the History of *Callistarchus* reported by *Diodor. Sic.* in his 15 Booke, *Sai-* das nameth this kinde of sound giuen by the *trumpet*, *apostaton*, as it were a calling backe, or a command to retire.

The

The *trumpet* finally was used as a *signe* for the Army to stand, or to go forward as was business required. Albeit I must confesse, there were other vniuersal signes besides the trumpet in this case: *Eso* saith, in exercise of Horse, *whitherso* he means the Body, you are to give *signe* either with the voice alone, or with the *Trumpet*, or else with the blowing downe of a *Waintrill*, and so to move them, *whitherso* you would have them to make alle; you are to direct either with the voice, saying *stand* or with the *Trumpet* or with the noise of a *T. argenteus* upon with a sword. The like he speaketh of the exercise of foot in the same Chapter after in the 9th Ch. he saith, you shall command the Souldiers to stand by knowing exactly the sound of the *Trumpet*, & againe more by the sound of the trumpet. So that although other signes were used for marching & retreat, yet the most common signe was by the *Trumpet*, & now we are to vnderstand, that all signes given by found to the eare (except by the voyce) are called *signa fonnoculata*, because albeit their found be lower and stronger for the most part then the voyce is; yet they are not articulated as is the found of the voyce. Hitherto of signes that were given to the eare by the found. Now we to speake briefly of mute signes, or those that were set vp, as it were, a mark for the eye.

Mute signes were of two kinds: for either they were *simple*, and used by themselves, as an object of the eye alone, or else they were *mixed*, and ioyned to signes of found, and so communicated both to the eye and to the eare. Of the second sort were those whereof I haue spoken a little before, and they were called *signa mixta*, namely when a *mute signe* is added to a *vocal*: as when to the Word in the night is ioyned some speciall gesture of the body, as holding downe or nodding of the head, lifting vp the hand, putting off the hat, heaving vp the skirt of the garment, &c. concerning which see *Omnifidus* & *adrian*. Of the first kinde were signes presented to the eye alone, which extended very largely, and serued where neither voyce nor trumpet could be heard by reason of the remoteness of the place; these were called *signa*, *signes proprii*, and *signa* likewise, because it was agreed by the parties, who gaue and tooke them, that they should haue such and such signification. The words be different, but the meaning and effect is all one; for as no signe can be, but there must be a giuer and a taker of the signe, so in that respect the signes called *signa* by reason of the communication betwixt the giuer and taker of the signe, may aptly also be termed *signa*. And albeit I noted before that the *signe* of the battaile and the watchword was called by no other name but *signum*, yet it *signum* taken often for a *mute signe* also: for many occasions were of giuing these signes, and they were sometimes shewen by day sometimes by night, and in the day time they might be perceived. *Arrian* historieth of Alexander the Great, that as he being in the Countrey of the *Taniansians*, his enemies *Clytus* and *Glaucias*, had with many horse, darters, and slingers, and a few armed men, taken the *Monemans* and high places, by which he was to passe in returning. The place was straight and woodles, thus up on the one side with a river, on the other side with an exceeding high mountain, the sides whereof were very steep, so that the Army could not march with more then foure armed in front. Alexander marshalled his troopes to 120 in depth, and ordering 200 horse on each wing, he commanded silence, and heede to be taken to his directions: And first he willed the armed to aduance their pikes, then upon a signe giuen to let them fall, and charge, then to turn them close knit to the right hand, then

to the left, and sometime he moued the battell quickly forward, and sometime he moued it to the one wing, sometime to the other. And so fashioning it into diuers shapes in short time, and at last casting it into a wedge, as it were, he led it against the Enemy, who stood wondering at the speediest and good order of the diuers motions; and now perceiving the Army to be led against them, abode not the charge, but left the hill, which he held, and fled. Here are mentioned seuen severall motions of the Phalange, which were haue in practice at this day: 1. A *winning* of Pikes, 2. *charging* of them, 3. first to the right hand, 4. then to the left hand, 5. *mouing* of the battell forward, 6. *mouing* it to the right wing, and then 7. to the left. And all these motions were directed by a signe; what this signe was, may be doubted, because it is not exprest whether it was by voice, trumpet, or a *mute signe*. For my part I would not take it to haue beene by voyce; for how could the voyce be heard in so great an Army as Alexander had (which according to *Diodorus Siculus* consisted of 30000 foot and 3000 horse) and was stretched out in depth, and had but foure armed in front: nor yet would I imagine it to haue beene giuen by trumpet; because, though perhaps the trumpet might be heard of all the Army, by reason of the Echo rebounding from the Mountaine and river, yet could it not fitly and cleerely distinguish the sound that should direct these seuen severall motions: I haue before declared in what case the trumpet was employed. Let me with leaue therefore thinke, that it was a *mute signe* presented to the eye; as for the purpose a *coat*, or other garment fastned to the end of a long staffe, the colour whereof being eminent, and the staffe being lifted aloft might be perceived by the whole Army. The signe then aduanced to the full height, might signify *advancing* of Pikes, which was the first motion. Being abased and held lowell before the front, charging to the front, which was the second motion; held out to the right flanke charging to the right hand, to the left flanke, charging to the left hand, which were the third and fourth motions of Alexander: *mouing forward* in front, it might be a signe for the battell to follow, which was the fifth. *Mouing* to the right hand, for the battell to march to the right, which was the sixth: to the left, for the battell to move to the left, which was the seventh, which motion might more easily be performed, in case the ensignes of the particular Companies tooke their direction from the maine signe, and ours of their Ensignes: This I say is my coniecture, wherein notwithstanding I preiudice no mans opinion, but leaue every man to his owne conceit and fence. *Xenophon* relateth a notable example of *iphrates* the Athenian, who being chosen Admirall by the Citty, as soone as he began to take the Sea with his *Naue*, both at once sailed, and also prepared all things necessary for Sea-fight: for he left at home the greater shales, as one that sailed forth to fight; and seldome used the greater masts, were the winds neuer so faire, but hasting forward with the oare, he both made the bodies of his men strong and heauiy, and the *Naue* gained a speedier way: and oftentimes where he meant to dine, there would he draw his whole *Naue* from the shore in a wing; and turning them about, and addressing their prowes to the land, give a signe for the ships to hasten with all celerity to the land, every one as it could. It was a great reward and victory for those that came first to land, to water, and take all things they needed, as also to dine and a great punishment to the sluggards to want those commodities, and besides to put to sea again, when the signe was giuen: for the first did all things at ease, and as they list, the last were freightened with haste, then

Diodor. Sic. lib. 16.

Xenophon. hist. grec. lib. 1. c. 5. v. 6.

A single file.

The Tatticks of Ælian, or

must doe as they could. When, by chance he dined in the enemies Countrey, he set out Sentinels some upon Land as behooued, other upon ships rearing up the Masts, that from thence they might take a view of all things: for these being placed in a high station might easily discern and see further, then the other standing upon even ground: wherefoever he supped and slept, he suffered no fires to be made in the Campe by night, but held lights before the Campe, that no man might haue access to it without discovery. Oftentimes in faire weather he no sooner supped, but put to sea againe, and in case there were a fresh gale, sailed forward, and the sailers in the meane time gaue themselves to rest: when hast was needfull he releued the sailers by turnes, and in the day time upon signes led sometimes in a wing some times in a phalange.

a Xenophon
Xenophon hist. grec.
l. 6. § 57. C.

b Leo c. 19. § 40.

That these were mute signes from the Admirall ship (besides that the word *enquire* importeth so much for the most part) no man I thinke acquainted with Sea-service will make question, considering that both *voice* and *trumpet* easily giue place to the whistling of windes and roaring of tempests, and raging of waues of the Sea. To say nothing of the distance of one ship from another, nor of the tumult and cry of Mariners, or found of oares (for in those times sea-fights were altogether in Gallies driuen with oares) which make them vncapable of direction by any other kinde of *signe*. And for these mute signes to be giuen by sea, I meane, of what kinde they should be, and to what end, and in what manner deliuered, I thinke good to cite the words of the Emperour *Leo*, which found thus: *Let there be saith he, in your Galley a*

c Leo c. 19. § 42.
d Xenophon.

*signe standing in some eminent place, either an ensigne, or some bannerall, or some such like, wherewith after you haue signified what is to be done, your direction may straight be vnderstood and executed, whether you would haue your Nagie to goe to charge, or retire from the Enemy, or to counter-march to encompassse the enemy, or to hasten to relieue some of your owne party distressed, or slacke or quicken their aduancing, or lay or avoid an ambush, or such like: that they seeing the signes from your ship, may rectifie direction what is to be done. And a little after he declareth the manner and v- sage of these signes, saying; Let the signe be shewne either standing upright, or inclining to the right or left hand, or listet aloft, or let fall low, or be taken cleane away, or transported to another place, or changing by making the head of it appeare in diuers formes by adding other shapes of colours vnto it, as was vsed by the Ancients. For their manner was in the day of battaile to reare up a red coloured signe, which they called *conius*, and it was nothing else but a peece of red cloth exalted upon a long staffe, and such like; but it may be more safely deliuered by your owne hand, I thought good to cite these passages of *Leo*, the rather to giue light to the place last before recited out of *Xenophon*. For out of this precept of *Leo* the practise of *Iphicrates* his motions may more perpicuouly appeare.*

e Dio. Sic. l. 3.
372.

Now that these red coloured signes, and signes of other colours also were vsed in fights on land, *Polibius* sheweth in the battell betwene *Antigonus* the Macedonian King, and *Cleomenes* the King of Sparta. *Antigonus* Army consisted of diuers nations, Macedonians, Agrians, Galatians, Achæans, Bæotians, Epirotes, Acarnans, Illyrians. *Cleomenes* his enemy had taken and fortified all the streight passages which led into the territory of the Lacedæmonians (for thither did *Antigonus* bend his inuasion) and so disposed his forces that *Antigonus* could not passe without fight: Hereupon *Antigonus* resolved to fight; and because his fight was to be ordered in and against diuers places, and at diuers times, as his aduantage fell out, he gaue diuers signes to his different people, when to giue on: The signe to the Illyrians was, then to charge vp the

f Polyb. l. 1. § 10.

Caesar l. 1. de bel.
l. 3. § 3.

Diod. Sic. l. 3.
l. 3. § 42.

Appian in Hist.
l. 3. § 42.

Virgil. l. 3. § 42.

Anton. § 42.

or if a Terrarchy lead,

* *2mo equitior.*
Xenoph. lib. 8. c. 1.
16. 587. C.

* *Leo c. 19. § 40.*

* *Leo c. 19. § 40.*
* *equitior.*

* *Leo c. 19. § 40.*

* *Diod. Sic. l. 3.*
372.

* *Polyb. l. 2.*

* *72. equitior.*

direct's times, as the
people, when to give on : The *signe* to the Illyrians was, then to charge vp
the

* *Cæsar l. 2. de bel.*
l. 1. c. 3. 1.

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l :

rp * *Diod. Sic. l. 3.*

rp 719.

* *Polyb. l. 3. c. 5.*

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* *Appian in 114.*

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in Soc. Virg. l. 3. c. 5.

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* *Macrob. l. 2.*

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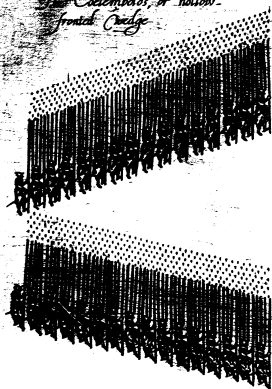
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That some kinde of march is a (2) *right induction*, other (one a
(3) *deduction* on the right or left hand, and that in a *single*, or
double, or *treble*, or *quadruple* side a battell : In a *single*, when one
Enemy is feared, in a *double*, when two in a *treble*, when three
in a *quadruple*, when the Enemy purposeth to give on all sides. Therefore the
March is vnderaken sometimes in a *single*, sometimes in a *double*, or in a *three-*
fold, or in a *fourfold* phalange.

(4) A *right induction* is, when one body of the same kinde followeth ano-
ther, as if a *Xenagy* lead, the rest follow *Xenagy-wise*; or if a *Tetrarchy*
lead,

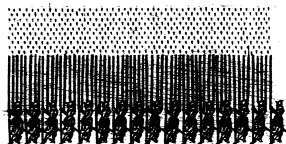
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The Cademboloi, or hollow
frontal Charge



Cap. 36.

The right Induction



The front

8. Polyb. l. 2. c. 11.

8. Polyb. l. 2. c. 11.

DIUETS TIMES, AND THE ENEMY WAS THEN TO CHARGE UP
people, when to giue on: The signe to the Illyrians was, then to charge vp
the

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the hill, when they saw a white linnen cloth held vp from the place about Olym-
pus, to the Megalopolitans and horse, when they saw the King lift up a purple gar-
ment. * Caesar commanded his Soldiers out to fight without his direction, say-
ing, he would giue a signe with an ensigne, when he would haue them begin. And al-
beit the colour of red was vied for the most part in Signalls, yet was not the
signe might giue notice of the Generals intent to them, whom it concerned: the
first Ptolemie gaue a signe to his Nautie to begin the fight by hoisting vp
a guile Target in his Admirall galley, * other with holding vp or shaking their
garment, or their hand, or with wearing some vnsuall marke vpon a horse, vpon
Armes, vpon vestures, or such like. This is to be noted for a generall
rule, that when you finde in history a signe was giuen at a great distance, and
it is not exprest what signe it was, you must vnderstand that it was a mute
signe prented to the eye, because the fence of hearing is feeble, and not able
to discern farre off. Hitherto of mute signes giuen by day. In the night, when
all was couered with darknesse, and the vie of sight taken away, the vsuall
manner was to giue a signe by flame of fire, which manner of signall might be
descried in the night, being the darknesse neuer so great: * Scipio Africanus * Appian in his
the younger hauing enclosed Numantia round about with a trench and ram-
pier, commanded that if the Enemy fell out vpon any part of his fortification, a red
peece of cloth should be hid out by day vpon a long staffe, a flaming fire by night, that
himselfe or his chiefe officers might come to succour. The like shall you finde in
Caesars Commentaries and Curtius and in other Historiographers both
Greece and Latine. See Virgil. l. 3. a. 5.

These were the signes vied in the battell, and in the Campe: without the Campe
were set Sentinels both horse and foot to fore-warne and giue aduertisement
to the Generall of the Enemies approach. To these oftentimes the Gene-
rall gaue a signe among themselves, and they by signes signified what was
done abroad. For the manner of placing these Sentinels, see Aeneas. The
signes themselves were such as might be discerned by the eye, and of that
kinde and forme whereof I haue made mention already.

Of Marching and of the diuers kind of battells fit for a march. And first of the
right induction, of the Cademboloi, and of the Triphalange
to be opposed against it.

CHAP. XXXVI.

- (1) **B**Eing now to speake of marching, I will first giue to vnderstand
that some kinde of march is a (2) right induction, other (3) a
(3) deduction on the right or left hand, and that in a single, or
double, or treble, or quadruple battell: In a single, when one
Enemy is feared, in a double, when two in a treble, when three
in a quadruple, when the Enemy purposeth to giue on all sides. Therefore the
March is vnderaken sometimes in a single, sometimes in a double, or in a three-
fold, or in a fourfold phalange.

(4) A right induction is, when one body of the same kinde followeth ano-
ther, as if a Xenagie lead, the rest follow Xenagie-wise; or if a Terrachry
lead,

D 2

lead, the rest follow according to that forme. It is so called when the march stretcheth it selfe forth into a *wing*, having the *depth* many times exceeding the *length*.

Against it is opposed the *Cæmbolos* or *hollow-wedge*, which is framed when the Antistomus *diphlange* disjoyneth the leading wings, closing the reare in forme of the letter V, as the figure after doth teach, in which the front is dissiuved, and the reare ioyned and knit together: for the right induction pointing at the *middle* of the Enemies battell, the Cæmbolos quickly opening before, serueth both to *frustrate* the charge of the front of the *induction*, and to *close in* and circumsent the *flanks* thereof.

Furthermore a Triphalange is to be set against the Cæmbolos, one Phalange fighting against one wing of the Cæmbolos, the second against the other, and the middle or third phalange forbearing, and expecting a time fit to charge.

NOTES.

THe Marching of an Army is a principall head of warre. Aelian toucheth it no further, then to shew the order and shapcs of battells fit for a March: and were it possible, that all grounds were alike open, and without impediments, as namely without trees, ditches, hedge-rows ragged waies, valleys, hills, brooks, and such like, the best forme of your marching should be to proceede with your whole phalange in a *square battell*, which forme is ready for all attempts of the enemy, and is the beginning and fourse of other formes, and with no great difficulty will take &c be changed into any shape you desire. Leo sheweth the inconueniency of the *Herse* or induction in marching thorow Champaine and large plaines, first in that the Enemy with a *broad-fronted* battaile may enfold and encompass the front, and so easily rout it then, because if the Enemy charge the *flanks* it will quickly be broken, as being without depth: further, if he fall vpon the *reare*, it is in the like danger of encompassing, as was the front: lastly neither can the front giue succour and assistance to the *reare*, in case it be ouerpressed by the Enemy, nor yet the *reare* to the *front*, they being so farre distance one from another. And he concludeth that the forme of a *square* or *broad-fronted* battaile, is fit for a march in all occasions, being easily to be ordered, and without danger. But seeing it is not possible, as *Polibius* saith, or else very hard to finde out places of no furlongs, or more, where in none of the impediments aboue recited shall be, the formes of marching, must necessarily be accommodated to the ground and wayes through which your forces are to passe: what formes they be, the following Chapters will shew.

2. Some kinde of March is a right Induction. The expectation of the enemies approach is oftentimes a cause of varying the kinde of march: if he alwayes appeared in front, there should need no other proceeding, then with the file-leaders in front: because he seekes his advantage, and in the March sometimes attacheth the reare, sometimes one flanke, sometimes another, the Grecians to provide for all attempts, so ordered their March, that wheresoever they feared the enemies giuing on, there they opposed the file-leaders, as the best men of the Armie, and most able to receive the assault: yet for the most part the March was undertaken in a right induction, that

that is, without inuerting the ordinary kind of file-leading in front, which also is our manner of marching at this day. But yet sometimes in a

3. *Deduction* on the right or left hand. There is but one kind of right induction, viz. a march, that hath the file-leaders in the front. Of Deductions there are a kinde: one to the *right*, the other to the *left hand*. And because the file-leaders march on the right or left hand flanke, not in front; therefore the one is called a *right hand deduction*; the other a *left hand deduction*. So that not the body which continueth or begetteth the march, but the place of the file-leaders in the march, makes the difference betwixt Induction and Deduction. What the Use of Deduction is, we shall see in the next Chapter.

4. *Right Induction* is. Aelian describeth the right Induction by the marching of seuerall bodies of one kind one after another: as if a Xenagy lead, all the rest of the forces are to be separated into Xenagies, and singly one after another to follow the first leading Xenagy: so of other bodies lesser or greater. Notwithstanding in a right Induction, we must take this caution with all, that the file-leaders proceed in the front; for otherwise if they bee placed in the flanke, it is now no induction, but a deduction, howsoever the seuerall bodies of a kind follow one another.

This is that manner of marching which is called, marching in a *wing*, of which I haue spoken sufficiently in my notes vpon the 30 Chapter. There are other kind of *inductive marches* set forth in the Greeke History, which are not altogether of the forme which Aelian describeth: for where Aelian would haue Xenagies to follow one another with the file-leaders in front, his meaning is, that the whole 16 files of the Xenagy should bee laid together all the file-leaders being layed in an euen front. Now you haue examples where whole Companies march in one file; so that all the file-leaders haue not the front, but rest included in the inward parts of the file, and yet many of these files ioyned together make an induction. Xenophon reporteth, that when Cyrus the elder was mustering and exercising his Army in the field, there came vnto him a messenger from Cyaxares the King of the Medes, being Cyrus his vnkle, signifying, that an Ambassador was arrived from the Indians, to which regard, said bee, the King would haue you to come to him with all speed, and I bring you from Cyaxares one of his richest garments: For he desireth in regard the Indians are to see you, that your presence may bee adorned with as faire and sumptuous apparell as may bee. Cyrus receiving this message, commanded the first Taxisarch to stand in front, haue his Company ordered behind him in one file, and himselfe holding the right corner file of the battell, and willed him to deliuer that Command to the second Taxisarch, and so the word to passe to the rest. They quickly obeyed, and put the Command in execution; and so it came to passe in short space, that the Front had in it 300, (for so many the Taxisarches were) the depth of the battell 100. After they stood in this order, he commanded them to follow as he led, and straightway he led them running: but because hee perceived that the way was too straight to march with so many in Front, hee willed the first Chilitarchy to follow in the same order in which it then was, and the second in the Reare thereof, and so the rest: and he sent two Sergeants to the turnings of the way to giue direction to such as were not fully instructed in the businesse. When they were come to Cyaxares gate, hee willed the first Taxisarch to order his Company 12 depe, and the 12 Dodecadarches to stand in Front all along the pallace, and hee willed to signify so much to the next Taxisarch; and so the rest one to another through the whole Army. They did as they were commanded: and he went in to Cyaxares. Here haue you

A Xenagy and a Syntagma, are all one: It consisteth of 16 files, 16 men to the file.

Xenoph. Cyrus l. 2. 56.

A Taxisarch was a Captaine of 100 men. He is to be distinguished from the Taxisarches were) the depth of the battell 100.

This was a body of 1000 men; and they were now ordered to stand in Front, the depth 100. The file was 140, and the Dodecadarches commanded the hinder half file.

first a Company drawne into file, and so standings; then 299 Companies fashioned into files, and laid flank-wise to the first, and so marching as long as the ground would permit: The ground afterward being capable of no more than 10 in front, the Chiliarchy of the right hand was drawne forth to lead the march, which consisted of 10 Companies, the Body being 10 in front, and 100 in depth. The rest of all the Chiliarchies followed the Reare one of another in the same order: coming to a place where Alte was to be made, the first Taxiarch drew out his Company by 12, placing the first file leader in front with the first 12 of the file, and sleeving up the Dodecadarch of the same file to front with the file leader, and the hindmost 12 of them that followed him to ranke with the former halfe file; the like was done by the 3 other files, so that each Taxis had 8 in front, and 12 in depth, and there being 30000 men in that Army, the whole Army comprehended 300 Taxis, the halfe files of 12 a peece amount to the number of 2400: so many men in number also making the Front of the Army. And for the leading of the first Chiliarchy in the straight way, and the rest following in the like forme, it was an induction, which notwithstanding directeth from Aelians induction. Aelians Chiliarchy in the induction requireth the file leaders in front, this differed them in the whole body, Aelians Chiliarchy would have had but 16 in depth, this had 100. For marching in like manner with the Captains before, and the single files of a Company cast into one file after them. I finde another example in Xenophon. The elder Cyrus being to invade Assyria by night, directeth his Army thus: Let us leave with the carriage beasts and waggons, such as are fittest for that service, and let Gobrias be their Leader, because hee is both skillfull in the waies, and otherwise sufficient for any affaire of Command: And let us set forward with the best and most able horse and foot, carrying with us victuall for three daies: for the lighter, and with the leste cumber wee shall appoint out selues, with much the more pleasure the after passing daies shall we dine, suppe, and sleepe. Next let the march bee ordered in this manner: First, you Chrylonthas, lead the armed foote with all their Captaines in front, as long as the way is even and broad, and let every Company bee ordered in depth souldier after souldier file-wise for the closer we put our selues together, the sooner and safer shall we end our march. I be cause why I would have the Armed goe before, is in regard they are the best of the Army, and when the best goe before, the light must needs follow at ease. But when the lightest leads, especially in the night, it is no marvaile if the Army bee secured and distracted, the light easily slipping away, and hastening in the Vauit. Next unto these, let Artabazus lead the Targetiers and Archers of the Persians, and Andramias the Median, the Median footemen next, then let Embas follow with the Armenian foot, and Artuchas after him with the Hircanians, and next Thambradas with the Sacan foot, then Damatas with the Cadusian, and let all these march with the Captains in front, and on the right flanke of their Plestium the Targetiers (or Pelists) the Archers on their left, for so shall they better second one another. After these let the whole baggage march, the Commanders whereof must bee careful to have all things ready before they sleepe, and early in the morning to bee at the appointed place with their furniture, and decently to march forward. After the baggage let Madatas the Persian lead the Persian Horse with their Captaines in front, and let the Captains order their Companies in a file, as the foot Captaines did: Next after these Rambaces the Median in the same sort the Horse which bee commanded: Then you Tygraues your horse: Then the

other

other Horse Captaines every one the Horse with which they serve meet. And as the Cadusians came last to my service, let them close up the reare of the Army: Thus Xenophon.

The passage is somewhat long, but I thought good to recite it, because it containeth the order of night marches vssall of old time. First, the armed foote march every Nation after other, as long as the ground would give leaue, in a square battell framed of Company laid to Company, every Company drawne out into a file, the Targetiers on the one flanke, the Archers on the other: then the carriage: last of all the Horse. The reason is added why the slowest haue the Vauit, namely, left in the night, when all things (saith the same Xenophon) are to bee vnder stood and done by direction to the care, and not to the eye, the Horsemen or light armed (who are nimble & quick, the Horsemen by reason of the Horse that carry them, the light armed, because they are troubled with no weight of Armes) leading, they might happily with their speede out-goe, and leaue the heavy armed beehinde, who being burdened with the heauinesse of their Armes, can march but slowly.

But my principall end was to shew, that the file-leaders in an induction, are not alwaies placed in front; I will adde one example out of Xenophon more to the same purpose: When the Grecians that followed Cyrus the younger into Persia, returned toward their Country, they came as farre as the river Phisces, as they found there a bridge, and not farre off a great City called Opis, at which the best brother of Cyrus and Artaxerxes, leading from Susa and Ecabatana a mighty Army with him, to give aid to the King, met the Grecians, and causing his own Army to make alie, hee took vnto of the Grecians as they passed by. Clearchus led his Army 2 in front, and in his march oftentimes made alie. As long as the Vauit of the Army staid, so long the Reare must likewise stay. So that the Grecians were of opinion they had a great Army, and the Persian was abashed at the sight of such a multitude.

Whether this march were Aelians right Induction, a man would doubt, because it is not expressed by Xenophon particularly how the bodies of the Phalange did march: onely hee saith, that Clearchus led his Army in thins saith the Latine translation: I interpret it a in front. For two in depth it could not be, because Xenophon speakech of a stand made oftentimes by the Vauit which caused the Reare to stay. And had the Army bene but 2 in depth, it had bene all Vauit, the 20000 Grecians being ordered into two ranks and no more, each of them being 5000 men, besides that the Persian wondered at the multitude which passed by him in flanke, which flanke if it had consisted of no more then two, his wonder would soon have ended. But Clearchus vsed Art to make his number seeme greater, and being but 2 in front, they must needs be 5000 in file, to which 5000 giuing 6 foot a peece for their open order the ground will contain 30000 foot in depth, which amount to six miles of ours. The vssage of the Lacedaemonians was to march sometimes with 2 in front, if the way were straight. So did Dercilides in Asia the lesse, when entering into a City his whole Army followed him peaceably vnto two in front. So Archidamus the sonne of Agefilas, advancing against the Arcadians by a cart way that led to Cromum, ordered his Army 2 in front, as then his march fell out. When they approached one to another, Archidamus his Army being in a wing by reason

D 4

Five foot make a pace, 10000 foot are 5 miles, 10000 paces make 5 miles.

a Xenophon Cyrop. l. 5. cap. 2.

b Dercilides.

c hee led.

d Plestium is a hollow square battell.

of the straightness of the way, the *Lacedæmians* in a broad-fronted phalange, with targets close faced together, the *Lacedæmians* could not endure the charge of the *Archadians*, and forthwith both *Archidamus* was wounded through the thigh, and they flaine thus fought before him. Hee saith that *Archidamus* marched two in from wing-wife by reason of the straightness of the way. In that he saith wing-wife, he sheweth the army was drawne out in depth, which is proper to an induction; and when he maketh the way the cause, he giueth a reason, why it so marched. But to returne to that I first propounded, the inductions hitherto specified in the former examples seeme to differ from *Ælians* right induction, as neither hauing all the file-leaders in front, nor yet single bodies of the same kinde one to follow another, the companies being each drawne into one file, and then two, or three, or foure, or more of these files laid together, according to the largeness of the way, and the rest of the army following in the manner afore expressed.

5. Against it is opposed the *Cælembolos*.] The *Cælembolos* is a wedge hollow in front, and to be opposed against the right induction, saith *Ælian*. I haue noted before that it hath bene the manner of all famous Generals to fit the embattailing of their armies to the forme which the enemy vseth at the time of ioyning: and therefore it much concerneth the Commander of an army to be skilfull in all formes, which are of true vse, and to know the aduantage that one carrieth against another. The right induction is, and alwayes hath bene the ordinary forme to march in. To order your troopes in an aduantageous forme against it, the *Cælembolos* was inuented: It is called by the Greekes a *hollow wedge*, because it is not filled vp in the midst, but includeth a void space bias-wise in front betwixt the points of both wings, and ioyneth it selfe together in the reare. So that to one that shall view it behinde it seemes a plaine wedge, and yet in propriety of speech it cannot be called a *Wedge*; for a *Wedge* hath three sides and three points, and beareth the true forme of a triangle; and with the former point it chargeth the enemy, as hath bene shewne in the horse-mans wedge. This hath but one point and two sides, neither doth it charge the enemy with the point, but receiuing the front of his battaile into the empty space, striketh vpon both the flanks thereof with the wings, it hath opened, and so seeketh to disresse it; the *Cælembolos* hauing this aduantage, that it fighteth with the best men, viz. the file-leaders ordered in the inside of the wings thereof, not against the file-leader of the right induction, but against the weaker sort, who are ordinarily placed in the flanks thereof. The Latine names are more fit and significant to expresse the forme. By some it is called a *paire of tongues*, by other some a *paire of heres*, both appellations serving to set forth the right forme of the *Cælembolos*: for the one and the other open their foremost parts to a pretty distance, and the hinder parts, which are pinned and fastened together, end in a narrow point, as doth the *Cælembolos*. And they were so farre from tearing it a wedge, that they held it the best forme to receiue and frustrate the charge of the true wedge, as may be seene in *Vegetius*.

6. Which is framed when.] The fashioning of the *Cælembolos* [springeth out the *Diphalange* *Antistomus*. What that *Diphalange* is, we shall see in the 40 chapter of this booke. Thus much I may before-hand signifie, that the

the file-leaders ought to be placed within the hollow flanks of the *Cælembolos*, as it were a lying to the infidels; and the *Diphalange* *Antistomus* being once framed (which is to haue the file-leaders in the midst from the one end of the battaile to the other) there needeth no further labour, then to dispart the front in the midst (leauing the file-leaders on both sides) and to fasten and ioyne together the reare, to the end that the front of the right induction may enter into the hollowesse, but yet be mased, as it were in a net, and neither able to passe through the reare of the *Cælembolos*, being close shut, nor yet to giue offence to those that fight in the front of the *Cælembolos*, hauing no man whom they may charge in the void space; nor yet daring to breake the forme of their battaile after ioyning. For it is a good obseruation of *Vegetius*, that in fight the manner of your embattailing is not to be changed, nor any number of Soldiers to be transported to other places then they haue: For herewith tumult and confusion will straight arise, and the enemy will easily take aduantage of such as are not ready or fall out to be disordered. I haue said that the Latines and Grecians differ in the name of this battaile, howbeit they agree both about the forme, which may here appeare by *Ælian*, who resembleth it to the letter V, neither can there a better resemblance be made; for as the letter V consisteth of two lines which are open in the top, close in the bottom, so doth this forme of battaile of two sides, which in front are void, open, and disseuered, in the reare ioyned and closed fast together. If you will therefore frame this battaile, you must first make a square, the file-leaders being all in front; then must you wheele the wings of your battaile into the midst, and so your file-leaders shall be in the midst; lastly, you are to open the front of your battaile, leauing halfe the file-leaders in the inside of one flanke, and halfe in the inside of the other, keeping the reare close knit together: and for the opening, it ought to be somewhat more then will receiue into the void space the front of the right induction, which being once let in, the inward two flanks of the wedge where the file-leaders are, ought to face to both hands, and to charge the outward flanks of the right induction, and so circumvent them.

7. Furthermore, a *Triphalange*.] A *Triphalange* in this place of *Ælian* is, when a square body or phalange is from front to reare diuided into three parts. The figure shewes the manner. The *Triphalange* hath as much aduantage against the *Cælembolos*, as the *Cælembolos* had against the right induction. The *Cælembolos* compelled the right induction to fight with the worst men, and avoided the affront of the file-leaders, which were the best. The *Triphalange* hauing the file-leaders in front, opposeth two severall fronts: against the two wings of the *Cælembolos*, where there are no file-leaders (for they are alwayes disposed for the inside) and both auoideth the aduantage the *Cælembolos* sought, and maketh the *Cælembolos* fight with the worst men, in as much as one of the *Phalanges* chargeth the front of one wing of the *Cælembolos*, the file-leaders whereof are in flanke within the hollowesse, the other chargeth the other. Now it hath this aduantage besides, that it spareth reserves for all occasions, by off-holding the third *Phalange*. If the *Cælembolos* be beaten by the two opposing *Phalanges*, all is lost, and no hope left of winning the field, no other forces being to second it, where notwithstanding the *Cælembolos* hauing gotten the better, may be curbed, and the victory arrested by this reserve, and by the remnant of the other two *Phalanges* broken.

For de

a Oneind c. 16.

b Forcupi Veget.
c. 3. c. 18. 19.
c. d. c. 18. 19.
c. 19. Forcupi.

d Vegetius. l. 1. c. 18.

e Vegetius. l. 1. c. 18.
f Vegetius. l. 1. c. 18.

The Tactics of Aelian, or

Words of direction in the right induction.

- 1 The right-corner Xenagy march out { So is it of all other bodies, if they begin the march.
- 2 The rest follow in Xenagies

Direction for the Calemboles.

1. Wheele the wings of your battaile into the { So shall the file-leader be in the middest; but we must note that the two midlemost leaders must be centors for the other to wheele about.
2. Open your front to the right and left hand, keeping your Reare close.

For the Triphalange.

- 1 The two wings face to the right and left hand, the middle remaining as it was.
- 2 March out to the distance required: { That is, to be able to meet in a right line the two fronts of the wings of the Calemboles.
- 3 Stand, { When they come to the place required.
- 4 Face as you were.
- 5 Aduance and charge.

Of Paragoge or deduction.

CHAP. XXXVII.

- (1) **P**aragoge or deduction is when the Phalange proceedeth in (2) a wing, not by (3) file, but by ranke, hauing the commanders or file-leaders either on the right-hand, which is called a right hand deduction, or on the left hand, which is a left-hand deduction. For the Phalange marcheth in a (4) double, treble, or quadruple front, according to the place or part it is suspected the enemy will giue on. And both the paragogies beginning the fight in flanke, doe (5) make the length double to the depth. This forme of fight was deuised to teach a Squidier to receiue heedfully the charge of the enemy, not onely in front but also in flanke.

NOTES.

- (1) **D**eduction is when the Phalange.] Induction is spoken of, Deduction followeth, which is the second kinde of march. For these are no other

the Art of Embattailing Armies.

other kinds then Induction and Deduction: the one with the file-leaders in front, the other with the file-leaders in flanke. Neither doth the greatnesse or smallnesse of the body make any difference herein; be the body neuer so great (as is the Phalange) or so small (as one Company) yet must the file-leaders either lead, or else be in flanke of the march. The reare in necessity may well be made good by the bringers vp. Deduction is the mother of many formes of battailes visuall in marches: from it come the Calemboles, whereof we spake before; from it are the Antistomus, the Peristomus, the Homoiostomus, the Heterostomus, of which hereafter.

2 *When the Phalange proceedeth in a wing.*] Suidas hath, that Paragoge or deduction is said to be when the phalange marcheth with the file-leaders on the right or left hand; if on the left, it is said to be a left-hand deduction; if on the right, a right-hand deduction. He maketh no mention of a wing as Aelian doth. For it may to fall out, that the body may be such as hath the depth and breadth all one, as a Xenagy which hath sixteene in breadth, and sixteene in depth: some bodies also, as the Taxies and Tetrarchies haue the depth less then the breadth, the first holding sixteen in depth & no more then eight in breadth, the last foure in breadth and sixteene in depth, so that they march not in a wing. But because marches for the most part are undertaken in a wing, it is the cause why Aelian saith that deductions proceed in a wing, the depth whereof manifoldly exceedeth the length, and they proceed.

3 *Not by file but by ranke.*] That is, the file-leaders being wheeled to the flanke, after they haue settled themselves to march, proceed on their journey as they stand in the flanke, onely facing that way the march is intended, and returne not to lead in the front of the battaile, as they did at first. To lead by file is, when the file-leaders proceede, and haue their files following at their backe. To lead by ranke is, when that which was the flanke at first, becometh the front, and beginneth the march, and the rest follow accordingly flanke-wise: yet this is to be noted, that albeit the front of the battaile be changed in the deduction, yet remaine the files, files as they were before, and are not altered into ranks. Aelian himselfe giueth testimony hereto, affirming that the Phalange proceedeth not by file, but by ranke, whereas if the files held not their first name after wheeling to the right or left flank, the march forward (the file-leaders being in the flanke) should be by file and not by ranke.

4 *For the phalange marcheth in a double, treble, or quadruple side.*] A double-sided battaile is that, which hath the file-leaders on both the flanks, the rest backe to backe within, when the enemy giueth on. For otherwise, when they march forward, all their faces are set one way, that is toward the place whether the march is intended. A treble-sided battaile is, when three sides of the battaile are to be charged, whether the front and both the flanks, or both the flanks and the reare, or the reare, one of the flanks and the front, and the file-leaders are ordered on all the three sides. A quadruple battaile is, when the file-leaders are placed in front in the reare and in both the flanks. An example of the quadruple battaile will shew the vse and framing of the rest: for as the rest oppose one, two, or three sides against the enemy, so the quadruple fortifieth and strengthneth all the foure sides, by placing the file-leaders in them. Of ordering the file-leaders vpon one flanke, deduction may be an example; vpon both flanks, the Antistomus phalange vpon front

and

Asdrubal the Carthaginian sought to outpace Scipio, giving Mago his general of the horse commandment to charge Scipio, his army in front, whilst himself charged it in the rear. But Scipio turning the rear of his battell against Asdrubal, and opposing the front of it against Mago, overthrew them both, and slew 5000 Carthaginians, and took 1800 prisoners. To make the manner of fight in this forme more plaine, I thought fit to insert an hyffory or two out of Polybius and Arrian, as examples to illustrate that meaning of Ælian. In Polybius this is the history. The Gauls in great multitudes vnder the conduct of Concomitanus and Anercostus their Kings, transcending the Alpes, and passing thorough Lombardy, and falling upon a part of Hetrucia, had gathered rich spoiles out of that territory, and being now upon returne to their country, they were pursued by one of the Roman Consuls L. Æmilius and his army, not with intent to fight with them (for hee held it not safe) but to observe, fit times and places to distresse them, or else to keep them from further spoile. At the same time C. Attilius the other Consul having imbarked his legions in Sardinia, and setting saile for Italy arrived at Pisa, and holding his way toward Rome marched directly in the way in which the enemy was coming. The Celts being now about Telamon, a promontory of Hetrucia, their foragers fell into the hands of the Panturcers of Attilius, and were taken prisoners; they informed the Consul of all that hapned, and signified the presence of both armies, telling that the Gauls were at hand, and that L. Æmilius followed them close in their rear. Attilius partly maraushing at the strangeness of the news, and partly being full of good hope, because the Gauls seemed to be surpris'd and hemm'd in betwixt two armies, commanded the Tribunes to order his legions in a broad-front, and so to lead on leisurely, as long as the ground would give leave: himselfe in good time discovering a hill which hung over the way, in which the Gauls were to passe, took with him the horse, and fought with all speed to seize upon the top of it, and to begin the medly, conceiting thereby to have the honour and title of the whole service ascribed to him: the Gauls were at first ignorant of Attilius approaching, but conjectured only that it might be Æmilius had led his horse about in the night to seize upon some place: they sent therefore their horse and light-armed to beat the Romans from the hill: but some understanding by some captives that Attilius was there, they presently embattailed, or ordering their army into two fronts, the one before, the other behinde; for they knew that one army was following, and they expected as well by the noises they heard, as by that which they saw fall out at that time, that the other would meet them upon their march: Æmilius heard that the legions of Attilius were arrived at Pisa, but could not imagine they were come so neere; but after that by the sight about the hills, he perceived certainly they were at hand, he sent out his horse to second those that fought for the hill, himselfe ordering his battels after the Roman wonted fashion, led on against the enemy. The Celts embattailed those that are called Gسات and dwelt in the Alpes, against Æmilius, who they imagined would charge the rear, and next to them the Insabrians. In the front they set the Tauriscans and Boians (inhabiting beyond the river Po) turning their faces a contrary way to the former, and opposed to the access of Caius Attilius, the waines and waggons they placed without both wings, and sent their pray gained to a hill thereby, appointing a sufficient guard to keepe it. So the Amphibolus phalange, which the Celts cast themselves into, was not only fearfulfull to the eye, but also fitly ordered for fight. The Insabrians and Boians came forth to fight wearing bristles & a kind of loose and light coats; but the Gسات came out of a maine glory, and rethrewed them away, and stood naked, seeing that they had their armes alone in the front of the battell, imagining they were by that meanes fitter for action,

by reason of the bushes of the place, which would catch hold of any garment, and be a hinderance to the use of armes. The first fight was about the hill in the sight of all, by reason that the multitude of so many horse-men out of both armies were mingled together in fight; wherein it happened Attilius to be slaine (while too venturously he offered himselfe to danger) and his head to be presented to the Kings of the Celts, but yet the Roman horse-men bravely fighting, became masters of the place, and of the enemy: After this the foot joining, the accident was rare and marvellous not onely to them which were present, but also to all those, who can by reading represent before their eyes the truth of it which was done. For first the fight being attacked by 3 armies, it must needs be that the very fight in a manner of the conflict appeared strange and without example; secondly, who would not doubt either now or then, whether the Celts manner of embattailing were more dangerous, the enemy charging them in two places at once, or the best and a prett for victory, as opposing against both the enemies at once, and withall securin; themselves from encompassing and invasion of the rear: and which is of most importance, no hope being left of safety, if they should chance to be slayed. For that is the property and profit of the Amphibolus battaille, it made the Romans more confident, to have the enemy enclosed on all sides; and yet the brauery and noise and tumult of the Celts gave them cause of astonishment; For there was an invincible multitude of Trumpets and Shalmes, to which the whole army together adding the Pean, the cry was so great, that not onely the trumpets and army, but the places round about with their rebounding echoes seemed of themselves to praise. Further more, the sight and motion of the naked men that stood in the front, being in flower of their age, and excelling in talne of stature, was fearfulfull. Now all the Gauls that had by front were adorned with bracelets and chains of gold, which the Romans eyeing were partly affraid, partly being filled with rich hopes were incited much the rather to toyne basely; but when the darters running out of the Roman army according to their custome, threw many and terrible darts at the Celtes, the Celtes of the rear found good use of their coats and breeches; but those that fought naked in the front, this accident happening contrary to their expectation, were troubled out of measure and wonderfully perplexed: for the Gauls target being not of sufficiency to cover a mans body, the greater and nakeder their bodies were, the more were they subject to wound; and the lesse the weapons misst the mark. At the last, being not able to save themselves from the light-armed, who plied them a farre off, nor from the multitude of darts that fell amongst them, and being troubled and confus'd with their present state, some of them out of a rage and brutish rage ranne vainly upon the enemy, and willingly offered themselves to slaughter, other retiring leisurely to their friends, and shewing manifest tokens of feare, disorder'd them behinde. Thus the Roman light-armed allid the pride of the Gسات. But the multitude of the Insabrians, Boians, and Tauriscans, after the Romans had received their light-armed into their battell, and advanced the cohorts, (of armed) to toyne hand to hand, maintained a stout fight, and albeit they received many wounds, yet faint'd they not in mind: being onely inferior both generally and particularly in the kind of armes they bore. For both their targets in defence, and their swords in offence, had a great difference; by reason the Gauls sword is only fit to strike withall. But when the Roman horse from the hill batted downe in wing, and stoutly came to hand strokes with them, the foot-men of the Celtes were cut in pieces in the places where they fought, and the horse took them selves to flight: There dy'd therefore of the Celts 30000, and 10000 were take prisoners, amongst whom was Concolitan one of the Kings, the other K. Anercostus, flying to a certaine place with a few, killed

himselfe and his friends that were about him. This example hath *Polybius* of the Amphitomis Phalange; wherein he both sheweth the form, and the vie of it, namely, that it hath a front both waies to receiue the enemies charge before and in the reare. * *Arrian* hath another example in the battaile between *Alexander* the Great and *Porus* a king of India; his words are to this effect. *Alexander* was now come within the reach of mischiefe weapons, when he sent his Archers on horsebacke against the left wing of the Indians, to molest the enemy on that side, both with multitude of arrows, and with incurfion of the horse: and himselfe also having with him the troupes of Companies, shewing an against the same wing, using all celerity to fall upon them (who were yet out of order and in a wing) before they could reduce themselves into a Phalange. In the meane time the Indians knitting together their whole power of horse, made head against *Alexander* with all speed, giving their horse a full carriere. Then *Cæsus*, as was commanded, shewed himselfe at their backs. The Indians seeing this, were forced to order their horse in an Amphitomis, opposing one part (the most and strongest) to *Alexander*, the other to *Cæsus* and his troopes; which thing troubled the array and mindes of the Indians. And *Alexander*, taking hold of the opportunity, charged those which were opposed to him in the infamy, while the other were facing about to *Cæsus*. The Indians endured not the charge, but fled to the Elephants, as to a castle that was friend. Hitherto *Arrian*. In these two examples is lively set forth the naturall fashion of the Amphitomis phalange. And albeit both the parties that used it were beaten, yet the cause referred not in the forme, but in the valour of them that fought against it, if the Romans in one example, of *Alexander* in the other, *Alexander* himselfe using this very forme in the battell of * *Gaugamela*, obtained the famous victory against *Darius*, which is described by *Arrian* in his third booke, as did *Alfo Scipio* against *Asdrubal* in Spaine: so then by that which hath bene said, the difference betweene the Antitomis and Amphitomis phalange may easily appear; which albeit they either of them fight against the enemy in two places of the Phalange at once, and are like one to another in that respect, yet they differ in the places of the fight, the one receiuing the charge in both the flanks, other in front and reare. They are both defensive & statary, and if moue with you either of them during the charge of the enemy, you presently break the form, and lay the backe of the foldiers open to be annoied, especially if the enemy ouertop you in number: otherwise it will be no inconuenient to diuide the battell, and to fight apart with both; For that the Antitomis may be diuided, *Ælian* teacheth in the next Chapter: for the Amphitomis, hee saith the like in this Chapter in these words.

3 And also being diuided into a Diphallange. A Diphallange is when a Phalange is diuided into two; and being in one body, it is called a Phalange, in two bodies a Diphallange. About the Diphallange Amphitomis there is variance amongst the writers of this Art. *Ælian* would haue it to bee framed of a Phalange Amphitomis disioyned, and in the middest diuided into two parts: so that the fore-front is made with one of the hinder front with the other Phalange. The Treatise of Military Appellations annexed to the end of *Suidas* saith, that that is a Diphallange Amphitomis, which hath the file-leaders on the outides of both the flanks in a deduction, and the bringers vp within. I take *Ælian* to be in the right; for if the Amphitomis Phalange must haue the front and reare opposed to the enemy, what reason is there why the Amphitomis Diphallange should not be of the same nature, considering

a *Arrian* lib. 5. 1. 12.

A

a *Arrian* lib. 3. 4. c. 6.
b *Arrian* in *Parasiti*
Pag. 7.

the Art of Embattailing Armies.

dering that the Diphallange Antitomis hath the leaders, in the flanks, as the Phalange Antitomis hath: which appeareth not only in the next Chapter, but also in diuers other places of this Booke: neither doe I reade any where, that the Antitomis hath to do with the front and reare, nor the Amphitomis with the flanks.

The words of direction in the Amphitomis.

The hinder

- 1 Halfe files, face about to the right or left hand.
- 2 Charge the Pikes both waies in front and reare.

To restore to the first Posture.

- 1 Advance your Pikes.
- 2 Halfe files, face as you were.

The hindermost

Of the Diphallange Antitomis.

CHAP. XXXX.



Diphallange Antitomis, is that which hath the file-leaders placed not in a deduction outwardly, but inwardly face to face one against another, and the reare-Commanders without, one halfe in right, the other halfe in a left deduction. This forme is used against Horse, which giue on and charge wedge-wise: for the wedge shooting forth in a point, and having the Commanders following in the flanks, and endeavouring to disseuer and breake the Front of the foot, the Leaders of the foot foreseeing their purpose, place themselves in the middest, with intent either to repulse them, or else to giue them a thorow passage without losse. For the wedge flieth vp on the foote in hope to charge the multitude in the middest; and the foote Commanders conceiuing well the fury of that forme, leaue a little space betwixt the 2 fronts, and stand like walles on both sides, and ioynently facing toward the middest, giue them a fruitlesse and empty passage. This forme of Horse battaile is called by the Tacticks a wedge, which was inuented by *Philip* King of Macedony, who placed his best men before, that by them the weaker fort might be held in & enabled to the charge. As wee see in a Speare or sword, the point whereof quickly piercing, makes way for, and letteth in the middle blunt yron.

NOTES.

A *Diphallange Antitomis*.] This Diphallange is thus defined by *Suidas* in *Suidas*, in a *Diphallange Antitomis* is that, which hath the file-leaders placed in the middest, and the bringers vp ordered without on both flanks in deductions: which words differ a little in speech, in sense are all one with *Ælian*. They both agree that the file-leaders should be placed within the middest of the battaile face to face in deductions, the bringers vp on the flanks without. In the text, and in fashioning of the battaile, there is no difficulty. The file-leaders must be

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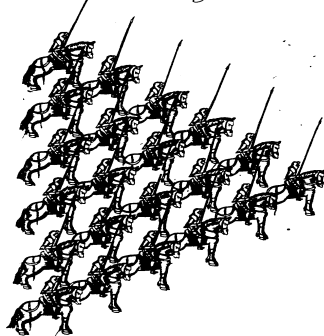
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himselfe and his friends that were about him. This example hath Polybius of the Amphictomus Phalange; wherein he both sheweth the form, and the vse of it, namely, that it hath a front both waies to receiue the enemies charge before and in the reare. * Arrian hath another example in the battaile between

a Arrian lib. 5. 11. 12. lex
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The Horsemans Wedge



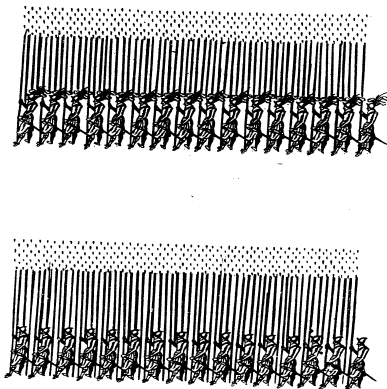
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a Arrian lib. 3. 4. c. 6
b App. in punicis
Pag. 7.

dering that the Diphalangy Antistomus hath the leaders, in the flanks, as the Phalange Antistomus hath: which appeareth not only in the next Chapter, but also in diuers other places of this Booke: neither doe I reade any where, that the Antistomus hath to do with the front and reare, nor the Am-

Cap. 40.

A Diphalange Antistomus



S. Suidas, in
Diphalangy

himself and his friends that were about him. This example hath Polybius of the Amphictomus Phalange; wherein he both sheweth the form, and the vse of it, namely, that it hath a front both waies to receive the enemies charge before and in the reare. * Arrian hath another example in the battaile between Alexander the Great and Porus a king of India; his words are to this effect; Alexander was now come within the reach of mischievous weapons, when he sent his Archers on horsebacke against

a triall 5. 112.

desiring that the Diphalangy Antistomus hath the leaders, in the flanks, as the Phalange Antistomus hath: which appeareth not only in the next Chapter, but also in diuers other places of this Booke: neither doe I reade any where, that the Antistomus hath to do with the front and reare, nor the Amphictomus with the flanks.

no

The words of direction in the Amphictomus.

The hinder

- 1 Halfe files, face about to the right or left hand
- 2 Charge the Pikes both waies in front and reare.

To retire to the first Posture.

- 1 Advance your Pikes.
- 2 Halfe files, face as you were.

Of the Diphalange Antistomus.

CHAP. XXXX.



Diphalangy Antistomus, is that which hath the file-leaders placed not in a deduction outwardly, but inwardly face to face one against another, and the reare-Commanders without, one halfe in right, the other halfe in a left deduction. This forme is vsed against Horse, which giue on and charge wedge-wise for the wedge shooting forth in a point, and hauing the Commanders following in the flanks, and intending to disconcert the Front of the foot, the Leaders of the foot fore-seeing their purpose, place themselves in the midst, with intent either to repulse them, or else to giue them a thorow passage without losse. For the wedge flieth vpon the foeke in hope to charge the multitude in the midst; and the foot Commanders conceiuing well the fury of that forme, leave a little space betwixt the fronts, and stand like walles on both sides; and joyntly facing toward the midst, giue them a fruitlesse and empty passage. This forme of Horse battaile is called by the Tacticks *awedge*, which was invented by Philip King of Macedony, who placed his best men before, that by the weaker sort might be held in & enabled to the charge. As we see in a Spear, or sword, the point whereof quickly piercing, makes way for, and leueth in the middle blunt yron.

NOTES.

A *Diphalangy Antistomus*. This Diphalange is thus defined by Suidas; *Suidas*, *De* *A Diphalangy Antistomus* is that, which hath the file-leaders placed in the midst, *De* *deft*, and the bringers vp ordered without on both flanks in deductions; which words differ a little in speech, in sense are all one, with *Antistomus*. They both agree that the file-leaders should be placed within the midst of the battaile face to face in deductions, the bringers vp on the flanks without. In the same point, in fashioning of the battaile, there is no difficulty. The file-leaders must be placed

placed in the middle within, the bringers vp on the flanks without, and the battails being first closed, must be suddenly opened vpon the charge of the horse in the middle, and the file-leaders diuiding themselves halfe on one side, halfe on the other, and facing to the middle space with their whole files push at the horse with their Pikes, as they passe thorow. It is called a Diphallange, because the phallange is parted in two; as the battail opposed against the Cælembolos is named a Triphallange, because it consisteth of three parts severall, and in the ninth Chapter the whole Macedonian phallange is named a Tetrapphallangarchy, because the body is diuided into foure severall parts: and it is named a Diphallange Antifomus, because as the Phallange Antifomus receiveth the horse without in the flanks, and so repulseth them, so this altering that forme, onely by placing the file-leaders in depth within, and opening vpon the sudden receiveth the horse in the opened void space, either to be overthrowne by their Pikes, or else to giue them a passage without danger to themselves. This is one of the defensive battailes whereof I spake before. It is put in practice faith *Ælian*.

When the horse charge Wedge-wise. What a Wedge is, and of what force amongst the horse-battailes. I have noted vpon the 18 Chapter. Against it *Ælian* opposeth this forme of foot. But is there no other vse of it? Yes. For both the Cælembolos and Perifomus are as it were daughters, and proceed out of the loyres of this forme, both hauing their file-leaders in deductions within the body, and both opening, the first the front; the other the whole body, when they goe to charge, and yet the Diphallange Antifomus is defensive, the other two offensive formes. I will accordingly as I haue begun, illustrate the manner of the Diphallange Antifomus with an example or two. *Xenophon* describing the fight that was betweene *Artaxerxes* the king of Persia and *Cyrus* the younger, telleth of *Tissaphernes* (one of the foure Generals of *Artaxerxes* his army, that he led not in the first joining of the armies, but brake thorow the Grecian Peltaists (targetiers) that stood embattailed by the river. Breaking thorow, he slew no man: for the Grecians opening their battels, strooke and threw darts at his horsemen, as they passed thorough. Episthenes the Amphipolita, who held the estimation of an understanding soldier, was then commander of the Peltaists: *Tissaphernes* therefore with harrowing himselfe as one that had the worst, returned no more to fight, but going to the Grecian Campe, met the King there. So *Xenophon* Out of which passage wee may perceiue the vse of this manner of embattailing. *Tissaphernes* chose out of the Grecians to charge the Peltaists the weakest kind of souldiers, to make resistance against the horse, by reason they were furnished with small targets onely and darts. Then hee chargeth with his horse in a full Carrere: to auoid the fury of the horse, they opened and gaue him a free passage, but not without strookes and darts sent at his horse; and so made his charge more hurtfull to himselfe then vnto them: I cannot say the file-leaders were here in the middle, as *Ælian* requireth, because the charge was sudden and unexpected. In premeditated defences, there is no doubt, but it is the better way to place the file-leaders in the middle, considering they are accounted the strength of the battell, and in all conueniences are first brought to fight, especially being armed men, and able to offend the horse with their Pikes. This opening then auailed against the giuing out horse ordered in a narrow row: for that was the manner of ordering the Persian horse; and it may serue for any horse-battail if it bee wide

wide enough to receiue the horse within the front. Of ancient time sythed Chariots were in request, to which the look whether light or armed could make small resistance; they had two long staves appointed with sharpe iron fastened to the beame of the chariot bearing out before, and sythes standing out on all sides to cut a sunder whatsoeuer came in the way: the horse were armed and hardy to be wounded, as you may see in the figure of the 23 Chapter. They receiued then against them, was to open the battails in front with the darts to the end to let their passe thorough, which opening was after the manner I haue set downe in this Chapter. *Alexander* at Gaugamela being to fight with *Darius*, who had many of this kinde of chariots, and fearing the danger they might bring to his army, commanded his Phallange of foot, that when the chariots came they should knit themselves shoulder to shoulder, and break their way in their way, so that the horse being affrighted with the noise, might turne, and run in any way. But if by such means they would not be repulset, then hee willed them to open and make wide distances, thorow which they might hold out their horse without danger to his people. This was the prouision hee made against the Chariots: The event followes. After the trumpets had giuen the signe of battail, the armies charged one another casting forth great cries: And first the sythed Chariots flying out amaine, gaue much amazement and terror to the Macedonians. For *Mazæus* one of the Generals of *Darius* his host, to make the battail the falling on of the horse more terrible, came thundering with his weapons of damage in the reare of the chariots: But when the Phallange stood against their rage, and their men beat his target according to the Kings direction, there was great noise made, the noise whereof many of the chariots, the horses being affrighted, turned backe: and with irresistible violence rushed vpon their owne people: other falling vpon the Macedonians, who made large distances, those which entered were partly encompassed with darts, partly passed quier thorough. Some being past with the violence of their course, and working mightily with their sharpe sythes, brought with them many and sundry kinds of death: for the force of their sythes had such power to destroy, saue from any cut off the armes and targets and all; the necks of not a few were carried, heads falling to the ground the eyes yet seeing, the countenances all altered, some the rest due hee faced and put them to a fresh death. Histories of the history of *Diodorus*. But where hee noteth the harmes that came from the first and second charge, I take them they might haue beene auoided, if the distances had beene wide enough, because I finde in *Xenophon* in the battail betweene *Artaxerxes* and *Cyrus* mentioned by me before, that many of the chariots of the Persians came thorough the Phallange of the Grecians without hurt to any man: I doe thinke them to the vse of this forme, it hath beene so often, and may be so often be put in practice against horse, and not onely against horse ordered in a wedge, but also giuing on in a square, if it be so they charge by numbers, and the opening be wide enough, and sudden to keene the front of the horse. For against a grosse of horse, they cannot haue time to open wide enough; and if they open too timely, they leave liberty to the horse to charge either of the parts opened, as themselves shall please and by diuiding themselves, they diminish their owne strength.

conceiue not, vnlesse he should seeme to make *Eliau* contrary to him selfe. For the Amphistomus Diphallange hath nothing to doe with the flanks, as appeareth by *Eliau*, in the 24 Chapter. This Diphallange fighteth altogether in flanke, as the description declareth.

The Phalanges of the Diphallange Peristomus. What a *wing* is, and what *deduction* I haue shewed before. The meaning is, that the Phalanges Peristomus are both of them led obliquely (with the file-leaders in flanke) and in two deepe bodies; whereof the one hath in purpose to charge the right flanke, the other the left flanke of the aduersie square battaile.

The oblique deduction on the right hand. Albeit both these Phalanges are called oblique, yet we may not imagine, that these Loxe-phalanges are the same that is described in the 30 Chapter. For in that one of the Phalange forbear the fight, the other aduanceth to ioyne with the enemy; in this both fight at once, and haue their aduantage by charging the flanks of the enemy. That began the fight in front & had there the file-leaders, this in both flanks; this seeks to encompassse, that to auoid encompassing it selfe, as I haue shewed in my notes vpon the same Chapter.

The oblique deduction on the right-hand, hauing the file-leaders without. I must imagine, till further information, that here is a fault in the text: my reason is this; all *deduction* are made to oppose the file-leaders against the enemy in fight. So is the right-hand *deduction* vsed, when it is suspected the enemy will charge the right-hand flanke: the left-hand *Deduction*, when it is suspected he will charge the left; so in wheelings we turne the front against the enemy, so in countermarches. Now this forme being inuented to encompassse the enemy, and to fight vpon his flanks, I would thinke the file-leaders ought to be placed on the inward flanks of the Diphallange; as it is in the *Calambolos*; for were the bringers up to be within, they should sustaine all the weight of the fight, the battaile being once diuided; and the file-leaders standing without should idly looke on; which is contrary to the military discipline of the Grecians, whose care was to vse the file-leaders in fight as much as was possible. Neither is it thereupon to be concluded, that this Diphallange and the Diphallange Antistomus are all one. For although both haue their file-leaders within, yet doe they differ both in forme and end. In forme, because this moueth forward with both Phalanges, the other standeth still: this is oblique, the other in a straight line; that hath the front of the two phalanges even, this (as it falleth out in the motion) sometimes the one more forward; sometimes the other. In their ends, because this goeth to assault, and to breake the enemies battaile, the other standeth fast and seeks onely to save it selfe, the one being offensive, the other defensive. So that, as I said before, the *Calambolos* and this are both framed out of the Diphallange Antistomus, both hauing their file-leaders within the midst of the battaile; and yet differ in that the *Calambolos* is but one body hollowed within, this diuided into two bodies.

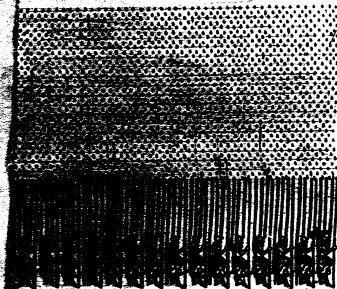
And they fearing to be enclosed. The case of this square is almost all one with the square against which the *Calambolos* is opposed: For both are in danger to be enclosed. Now as the other square was faine to cast it selfe into a *Triphallange*, and to oppose two of the phalanges against the two wings of the *Calambolos*, reseruing the third for all accidents; so this square diuideth it selfe into two phalanges (but hath no third) setting the one against the right-

Ælian, lib. 11. c.
 Pind. Sic. 169.

right-hand battaile of the Peristomus, the other against the left; for by this opposition they inhibit the enemy from attaching their flanks. Of this forme I finde not many *presidents* in the Greeke history; I will receite one-ly one out of *Arrian* concerning *Alexander*, which if it hit not this forme in euery point, yet it hath fully the effect of that which is intended by *Ælian*: *Alexander* being to deliuer battaile to *Porus* a King of part of India, lying on the other side of the riuer *Hydaspes*, found his enemies army to be thus embattailed: He had placed his Elephants in the front 100 foot distant one from another, and he placed them there to giue terror to *Alexanders* Horse, for hee imagined that no enemy durst approach the spaces betwixt the Elephants, neither with Horse for feare of the Elephants, and much lesse with foot, because the armed on his side were there to receiue them, and the Elephants would tread and trample them under their feet. Next he ordered the foot, not in an equall front with the beasts, but in a second front after them, so that the files came up almost to the spaces betwixt the Elephants; besides, he added foot vpon the wings about the Elephants. On both the wings of the foot he ordered his Horse, and before them his Chariots. This was the embattailing of *Porus*. *Alexander* as soone as he saw the Indians stand in battaile array, caused his Horse to make aile, that he might haue his foot come up, who advanced still forward. And when the Phalange was come vnto him running, he embattailed it presently, nor forthwith led it against the enemy, lest he should deliuer it weary and out of breath into the hands of the Barbarians, that were fresh, but tirceling and riding here and there in rounds with his Horse, he recited his foot, and gaue them time to refresh themselves. And after he beheld the Indian manner of Embattailing, hee thought it not good to giue vpon the middest (of the front) where the Elephants stood, and the Phalange was close ordered against the spaces of the Elephants, fearing the reasons to him the most of his Horse, he speeded to the left wing of the enemy, in purpose to giue on there, and sent *Cœnus* with *Demetrius* his troope and his owne troope against the right wing; commanding him, that when the Barbarians seeing his troopes, should turne their strength of Horse against him, *Cœnus* should inuade their backs. He gaue the Phalange to *Seleucus*, *Antigones* and *Tauron* to lead; commanding them not to all on, before they saw the enemies foot and horse put into a bransle by his Horse. What the euent of the fight was, I haue before shewed in my notes vpon the Phalange *Amphistomus*, where I haue cited the latter end of this history. Now may be seene by this example, that *Alexander* began the fight not in the front, but in the flanks; and the cause why he did it, was, because the front was exceeding strong by reason of the Elephants. And by this meanes defeating first the enemies Horse, then his foot, he left the Elephants naked, and without defence against the darts and other misliue weapons of the *Macedonians*, and gained a worthy victory against a strong enemy. Now albeit this example come not home in all points to the *Peristomus* (for *Ælian* limiteth it to foot against foot, this fight was betwixt Horse and Horse) yet is the reason of warre alike in both. For as the file-leaders of the *Peristomus* giue on vpon the flanke of the aduerser square, which is the weakest part of it; so did the Horse of *Alexander* surmounting the Indians both in number and valor, giue on vpon the flanks of *Porus* his army which was weakest, and so began and ended the victory.

It is called *Peristomus*, as having the front bent. That is, being diuided into halfe, the one Phalange marching obliquely, commeth vp and chargeth one flanke

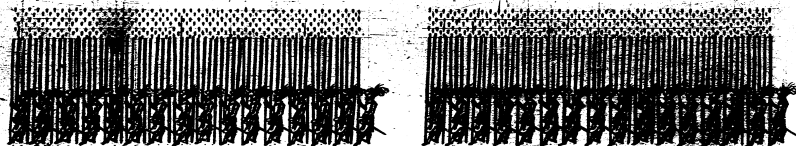
The Battail called Phalanx



The front

Cap 42

The Diphallonge Hymanostomus



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flank of the aduerse
fronts against the ene

- 1 Wheele y
- 2 Face to th
- 3 One wing
enemy

Of the 1



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flanke of the aduerse battaile, the other chargeth the other, and so haith the fronts against the enemies both waies.

Words of direction in the Peristomus.

- 1 Wheele your front into the middest of the battaile.
- 2 Face to the front.
- 3 One wing march out obliquely, and charge the right flanke of the enemy, the other the left flanke.

Of the Diphallange homoistomus, and of the Plinthium.

CHAP. XLII.



Diphallange (1) Homoistomus is so named, because a (2) whole file (that is 16 men) mouing by it selfe; another file followeth it: and it is therefore called Homoistomus, because they that follow, follow in a like figure.

3 This kind is opposed against the Plinthium; (4) Plinthium is a forme of battaile, that hath the sides equall both in figure and number. In figure, because the distances are euery where equall. In number, because there are as many men in length as in depth. (5) In this foure-sided battaile are none in the foure sides but armed, without archer or sling to helpe: when therefore two Phalanges march together, and both haue their leaders in a right-hand or left-handed deduction, it is called a Diphallange Homoistomus.

NOTES.

Homoistomus is a Diphallange, the battailes whereof haue like fronts. To this forme is incident, first that it be marching, then that it march in deductions; lastly, that the deductions be vpon one and the selfe, and not vpon contrary sides, viz. that the file-leaders of the Phalanges, be all of them either vpon the right hand, or vpon the left hand of their Phalanges. And therefore *Suidas* defineth it to be a Diphallange, which hath the leaders of either Phallange ordered in the same side of the march. Where he saith that the leaders are ordered on the same side in both Phalanges (which words are likewise in *Ælian* in the end of the Chapter) wee must vnderstand not the leaders of the March, but the file-leaders, who are also called *syntagma*, or leaders. For as *Ælian* saith elsewhere, the march in a Deduction proceedeth in wing not by file but by ranke, so that the file-leaders are in the flanks not in the front of the march; and yet a man may truly tearme it the front of the battaile, as long as it standeth and faceth against the enemy.

2 Because a whole file.] I am out of doubt that this place is corrupted: any man that marketh the coherence will easily be of mine opinion. The inscription is of a Diphallange, which consisteth of two phalanges. The cause why this forme is called a Diphallange, Homoistomus, is in these words assigned to be, because a whole file, that is, 16 men mouing, another file followeth it.

The Tackles of *Ælian*, or

let one file follow another, what is that to two Phalanges? Euery Phalange hath many files in it, as the ^{seuenth} Chapter will teach vs; nor will any man say that a file is a phalange, nor that the following of one file singly after the other will make a Diphalance: the truer cause is alleaged in the words following: It is therefore called Homoioistomus, because they that follow, follow in the like figure: which words albeit they be generally, yet being explained and particularised in the end of the Chapter, they shew, that it is called a Diphalance Homoioistomus when two phalanges follow one another, either in a right, or a left hand deduction. And by that part of the text the nature of the Homoioistomus is sufficiently expressed.

¶ A square battaile of men and ground both.

3 This is opposed against the ^b Plinthium. I How this forme should be opposed against the Plinthium, I must confesse I yet vnderstand not, vnlesse it be that being in a march, the Plinthium charge one of them on that side where the deduction, (that is in the front, for the flanke is now become the front) (the file-leader facing to the enemy that way) and the other if it be the leading phalange retiring & whealing, the following file aduancing and whealing) giue vpon the flank of the Plinthium, so that the Plinthium be charged both in front and in flanke, which is no small aduantage in fight; for otherwise if the Plinthium meet the Phalanges so following one another, and charge the front which leadeth (which indeed is not the front but the leading flanke, in as much as the march proceedeth not by file but by ranke, as *Ælian* hath) the deduction not onely loseth the benefit of bringing the file-leaders to fight, but is also subiect to ouerwinding, and by that means in worse case then is the induction which hath the file-leaders in front. There are other vses of the Homoioistomus, then are here specified by *Ælian*. For the Deduction directing the front against the enemy that appeareth, or is like to appeare on the flank of the deduction, the phalanges may fitly second one another, when either of them is charged, not unlike the two battailions of field or Champaign. And if both the deductions be charged at once, they are at no greater inconuenience, then if they stood ranged in ordinary manner, being either of them as deepe, and the fronts which are in the deduction ready to receiue the assault of the enemy, and the rest of the limmes disposed, as in the ordinary Phalange.

Le Moies Second Phalanx.

4 Plinthium is a forme of battaile. This definition comprehendeth not all Plinthiums, for there is a kind of euē-sided Plinthium (it is called ^{euē-sided} *euē-sided*), which hath the front & flanks of one length: and it is it which *Ælian* here defineth. There is also a kind of Plinthium that is deeper in flank then the front is long, which of ancient time was called ^{euē-sided} *euē-sided* in greeke, in english a tower, the name of Plinthium is deriued from *euē-sided*, a brick, because as the bricks square, so is this battaile, which is the reason I thinke, that it is often confounded with Plesium, this being also a square battaile, and the name deduced from the mould wherein bricks are fashioned, which mould is called in greeke *euē-sided* to forme. The difference betwixt them according to *Ælian* is, that the Plinthium is a perfect square equal both in length and depth, the Plesium a square longer in front then flanke.

In Reflection in Homer's version: & also in the name of Plinthium.

5 In this figure are none but armed in the forehead. ¶ What then becomes of the light-armed? they must be conuained into the midst; and the Plinthium ought to be hollow within as well to receiue them, as those of the army that

are

the Art of Embattailing Armies.

are vsnt for fight. Leo hath this precept: If the enemy be horse, you are to order the army into the square figure of a Plinthium, and cast into the (hollow) midst the carriage, beasts and carriage, and without them the armed, and furthest without the archers, that so you may dismarch in safety; yet this placing the archers without is contrary to *Ælian*, & to many experiences mentioned in the Greeke history. Timotheus the Athenian purposing to passe by the City Olynthus; and fearing the Olynthian horse-men, ordered his army into a broad-fronted Plinthium, casting the baggage and horse into the midst, and causing the waggons to be driven thronging and fastned together, the armed foot being without on all sides; so that the Olynthian horse could not come to distresse them. Bridas the Lacedæmonian being in Illyria, forsaken of the Macedonians his allies, expecting to be set vpon by Arthybeus the Illyrians, reduced his armed into a square, and taking the light-armed into the midst, resolved to retire: the youngest he appointed to fall out if the enemy and to resist the enemy that should first come to charge. The Barbarians seeing him dismarch, followed with great shout and cries, imagining he fled, and hoping to take him and cut his throat: but when the light-armed fell out and met them, wherefore they gaue on and himselfe with his selected band receiued them, and contrary to their opinion stood firme, and repulsed the first charge, and euer as they forbore to charge held on his way: the most part of the Barbarians left the Grecians, and appointed a party to follow their reare, the rest pursued the Macedonians that fled, by the captains of Eumenes and Peucestes against a surprize of Antigonus. Diodorus Siculus reporteth the history thus: Antigonus being aduertised, that all Eumenes his forces were come vnto him but onely his Elephants, and that the Elephants were expelled out of their garrisons, and were farre off alone, and without aide of horse and foot, sent against them 1000 square armed being: Meda, 300 Tarepentes, and all his light-armed foot; for hee hoped that falling vpon the Elephants alone, hee might easily become master of them, and priue his enemy of his greatest strength. Eumenes casting in his minde what might happen, dispatched away 1500 of his best horse, and 300 light armed foot. Antigonus people appearing first, the commanders of the Elephants ordering the beasts into a Plinthium, marched forward, throwing the carriage into the midst, leaving 300 horse and no more to make head in the reare; the enemy falling on with all their might, and hoily charging, the horse being overlaid with number, were put to flight. The riders of Elephants at first made good resistance and stood to it, albeit they were wounded on all sides, and not able to hurt the enemy; and being now at the last cast the forces of Eumenes unexpectedly shewing themselves, snatched them out of all danger and distresse. Antigonus vied this forme against the Thebans; the Argirapides against Antigonus: the history is this: Antigonus hauing the better against the horse of Eumenes, diuided his horse into two parts, the one he tooke to himselfe and obserued Eumenes, the other hee gaue to Ptochus willing him to charge the Argirapides and sluer targeteers old soldiers of Alexander; deprived of the aide of the horse, but they calling themselves into a Plinthium retired safely to the river. *Ælian* remembreth nothing concerning the vse of the Plinthium: But wee may learne by the examples rehearsed, that it was then practised when the enemy was too strong and able to charge euery way; and it is one of the foretold battailes that is mentioned in the 36 & 37 Chap and vied principally against horse, but sometimes against horse and foot. Philip

¶ Poly. 2. 29. 5. 25.

¶ Poly. 110. 57. in Brada.

¶ Diod. Sic. lib. 19.

¶ Ag. 6. Poly. 2. 29. 5. 25. 2. 29. 5. 25. 2. 29. 5. 25.

lib. 19.

Diad. Synt. lib. 16. p. 51. the father of Alexander the Great, being to take arms against the Illyrians who usurped many Cities of his kingdom, leuied 10000 foot, & 600 horse, and with them entered the enemies countrey. Bardilis the Illyrian King met him with as many foot, and 500 horse: when the armies came together, and with shous ioynd battails, Philip hearing the right wing, and the best Macedonian souldiers, commanded the horse to fall on and charge the enemy in flanke: himselfe giuing vpon the front, began a strong fight. The Illyrians ordering themselves into a Plinthium, valiantly abode the onset; and at the first the fight was equall, and so continued a good while, by reason of the valour (shewn on both sides), after ward the horse plying hard the reare and flanke, and Philip with his choice men valiantly laying at the front, the multitude of the Illyrians were forced to fly. Heere the Plinthium resisted both horse and foot: I will ad one example more of repulsing horse, the army being cast into a Plinthium. Marcus Antonius seeking to subdue Persia, and to reuenge the losse which Cræsus received by the Parthians, (for in that warre Cræsus himselfe was slaine, and his army defeated) and hauing laid siege to a great City called Phreata, and finding not the success he looked for, determined to dis-march and lead his army out of the Countrey, hauing first made truce with the King of Persia, proceeding on his iourney, he was set vpon by the Parthians, but being repulsed, they retreated that day. Antonius hereby resolved what to doe: and strengthening his reare and flanks with many darters & slingers, he formed his army into a Plinthium, and willed his horse to fall out and repulse the enemy, but not to follow the chase too farre. The Parthians the next foure daies began to be more coole, and neither charged nor were charged, and making winter their pretence, were glad to retire to their houses. By this president, wee may see, that the Parthians (who were mighty in horse) were fierce vpon the Romans as long as they held their ordinary kinde of march, but after they had ordered themselves into a Plinthium, so that the Parthians could not come vp to them without much indangering themselves, they thought it best to let them quietly passe and goe whither they would. And thus much of the Diphallange Homoiotomus and of the Plinthium.

*Aspian Parthicus
161.
Plotin Antonius.*

Words of direction in the Homoiotomus.

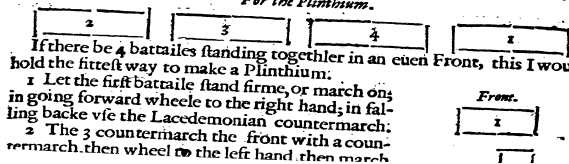
- 1 Wheele your battailes (if they stand in euen front) to the right or left hand.
- 2 March one battaile after the other.

To restore to the first Posture.

- 1 Face about to the right or left hand.
- 2 Wheele the battailes to the right or left hand, according as the case requireth.
- 3 Face as you were at first.

FF

For the Plinthium.



Diphallange Heterotomus is that which proceedeth by deduction, hauing the leaders of the former Phalange in a right-hand deduction, and of the following Phalange in a left-hand Deduction, so that the battailes march counterchangeably, one hauing the leaders in one flanke, the other in the other:

NOTES.

- 1 *Diphallange Heterotomus.* As the Homoiotomus consisted of two Phalanges, & both proceeded by deduction, so must this forme. They differ

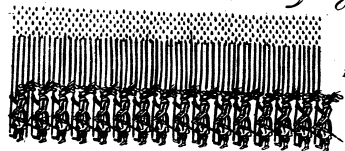
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Did. Syn. lib. 16. the father of Alexander the Great, being to take armes against the Illyrians who usurped many Cities of his kingdom, leuied 10000 foot, & 600 horse, and with them entered the enemies countrey. Bardilis the Illyrian King met him vi. b. as many foot, and 500 horse: when the armies came together, and with shouts ioyned battaile, Philip hearing the right wing, and the best Macedonian souldiers, commanded the horse to fall on and charge the enemy in flanke: himselfe giuing upon the front, began a strong fight. The Illyrians ordering themselves into a Plinthium, valiantly aboue the onset; and at the first the fight was equall, and so continued a good while, by reason of the valour shewen on both sides; afterward the horse plying hard the reare and flanke, and

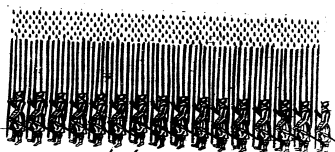
The Tactics of Ælian, or

Cap. 43.

The Diphlange Heterostomus



The File-leaders



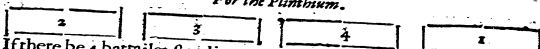
The bringer on

3 Face as you were at first.

For

the Art of Embattailing Armies.

For the Plinthium.



If there be 4 battalions standing together in an euen Front, this I would hold the fittest way to make a Plinthium.

1 Let the first battaile stand firme, or march on; in going forward wheele to the right hand, in falling backe vie the Lacedemonian countermarch.

2 The 3 countermarch the front with a countermarch, then wheele to the left hand, then march forward, and place it selfe behind the right hand flanke of the first, that the Front of it may be in a right line with the said flanke.

3 The 4 in going forward, countermarch the reare with a Macedon countermarch, then wheele your battaile to the right hand, face about; then wheele to the left hand; then march and apply it selfe to the point of the first battaile, as the third did to the right: then face about, and stand thus:

4 The 2 countermarch to the right or left hand: then march on til it be beyond the left point of the 4 battaile: then face to the left hand; and march vp to lay the right-hand-point eue with the right point of the 1 battaile, and face to the right hand, to make the reare of the Plinthium thus:

The seuerall bodies being brought into a Plinthium, must front every way as long as they make Aite. When they march in a Plinthium, they are all to face toward the head of their march: that is, the right and left flanke battalions are to face the one to the left, the other to the right hand: The reare battaile is to face about to which hand it list, and so march on.

The battalions beside haue every one their place of dignity: the first battaile hauing the front, the 2 battaile the reare, the 3 battaile the right flanke, the 4 the left flanke.

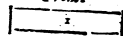
Front.



Front.



Front.

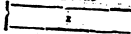


Front.



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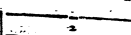
Front.



Front.




Front.



Front.

Of the Diphlange Heterostomus.

CHAP. XLIII.

(1)  Diphlange Heterostomus is that which proceedeth by deduction, hauing the leaders of the former Phalange in a right-hand deduction, and of the following Phalange in a left-hand Deduction, so that the battalions march counterchangeably, one hauing the leaders in one flanke, the other in the other.

NOTES.

1 A Diphlange Heterostomus. As the Homoiostomus consisted of two Phalanges, & both proceeded by deduction, so must this forme. They differ

F 3

fer in this onely, that the first had all the file-leaders on one side, either on the right or left; this the file-leaders of one battaile on the right, of the other on the left hand. For if the leading Phalange haue the file-leaders on the right-hand, the following Phalange shall haue them on the left: If the first haue them on the left, the other shall haue them on the right. See the figure. These of this form is, when the enemy sheweth himselfe on both flanks of our march, and of it the double sided battaile, whereof Ælian spake in the 36 and 37 Chapters, may be made by the fleecing vp the latter to the former and ioyning reare to reare: and if the leading battaile haue the file-leaders in the right-flank, it is to make alte when the enemy commeth neer, and the following battaile to fleecue vp by the reare of it, to make an euen front with the leaders of the first. Contraiwise, if it haue the file-leaders on the left hand. Besides, this forme hath further vse, and you may frame of it a Diphalance Antistomus, by fleecing vp the following battaile on that side where the file-leaders of the leading battaile march: for by such fleecing, the file-leaders of both Phalanges shall be in the middest.

Words of direction in the Heterostomus.

There need few words of direction in this, onely if the two ordinary battailes stand in equall front, let the one wheele to the right, the other to the left hand, and so march the one before, the other after.

Of the horse Rombe, and of the foot-halfe-moone to encounter it.

CHAP. XLIII.

THe battaile framed in a forme of a Rombe, was first inuented by Ileon the Thessalian, and was called *ile* after his name; and to this forme he exercised and accustomed his Thessalians. It is of good vse, because it hath a leader on euery corner: in the front the Capitaine, in the reare the Lieutenant, and on either side the flank-commanders. (2) The foot battaile fittest to encounter this, is the (3) Menoides or Cressent, hauing both the wings stretched out, and within them the leaders, and being embowed in the middest to enuiron and wrap in the horse-men in their giuing on: whereupon the horse-men ply the foot a farre off with flying weapons, after the manner of the Tarantines, seeking thereby to dissolue and disorder their circled frame of march. Tarentum is a City in Italy, the horse-men whereof are called Acrobolists, because in charging they first cast little darts, and after come to hands with the enemy.

NOTES.

THe battaile in forme of a Rombe. Of the Rhombe is sufficiently spoken in Chap. 6. before, and in the notes vpon the same Chapter: The manner of framing of it, and the diuers kinds thereof are there set down. The Thessalians

lians vsed not all those kinds but onely that which fileth, but ranks not, as Ælian testifieth in the 46 Chapter, which kinde is there also described. It is thus got

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fer in this onely, that the first had all the file-leaders on one side, either on the right or left; this the file-leaders of one battaile on the right, of the other on the left hand. For if the leading Phalange haue the file-leaders on the right-hand, the following Phalange shall haue them on the left. If the first haue them on the left, the other shall haue them on the right. See the figure. These of this forme is, when the enemy sheweth himselfe on both flanks of our march, and of it the double sided battaile, whereof *Ælian* spake in the 36 and 37 Chapters, may be made by the fleuing vp the latter to the former, and ioyning reare to reare: and if the leading battaile haue the file-leaders in the right-flank, it is to make alte when the enemy commeth neer, and the following battaile to fleue vp by the reare of it, to make an euen front with the leaders of the first. Contrariwise, if it haue the file-leaders on the left hand. Besides, this forme hath further vse, and you may frame of it a Diphallange Antistomus, by fleuing vp the following battaile on that side where the file-leaders of the leading battaile march: for by such fleuing, the file-leaders of both Phalanges shall be in the midst.

Words of direction in the Heterostomus.

There need few words of direction in this, onely if the two ordinary battailes stand in equall front, let the one wheele to the right, the other to the left hand, and so march the one before, the other after.

*Of the horse Rombe, and of the foot-halfe-moone
so encounter it.*

CHAP. XLIII.

(1) **T**he battaile framed in a forme of a Rombe, was first inuented by *Ileon the Thessalian*, and was called *Ile* after his name; and to this forme he exercised and accustomed his Thessalians. It is of good vse, because it hath a leader on euery corner: in the front the Captaine, in the reare the Lieutenant, and on either side the flank-commanders. (2) The foot battaile fittest to encounter this, is the (3) *Menoides* or *Crescent*, hauing both the wings stretched out, and within them the leaders, and being embowed in the midst to enuiron and wrap in the horse-men in their giuing on: whereupon the horse-men ply the foot a farre off with flying weapons, after the manner of the *Tarantines*, seeking thereby to dissolue and disorder their circled frame of march. *Tarentum* is a City in Italy, the horse-men whereof are called *Acrobolists*, because in charging they first cast little darts, and after come to hands with the enemy.

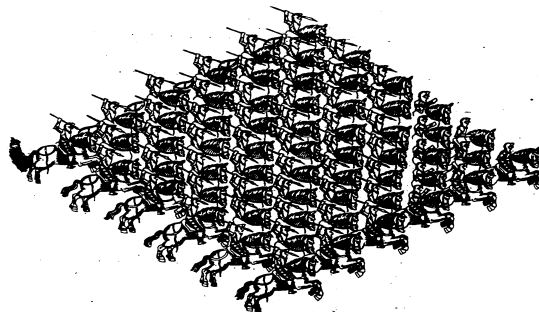
NOTES.

¹ *The battaile in forme of a Rombe.* Of the Rhombe is sufficiently spoken in Chap. 6. before; and in the notes vpon the same Chapter: The manner of framing of it, and the diuers kinds thereof are there set down. The Thessalians

Ælian vsed not all those kinds but onely that which fileth, but ranks not, as *Ælian* testifieth in the 46 Chapter, which kinde is there also described. It

Cap. 44

The Rhombe of Horse



The Front

fer in this onely, that the first had all the file-leaders on one side, ei-
ther on the right or left: this the file-leaders of one battaile on the right,
of the other on the left.

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opposition and disadvantage, then when they are received in front alone. In square battailes of foot the front lying even, the horse in charging abide only the danger before, whereas in the hollow fronted battailes of foot, such as are this forme, and the Epicampios emprothia, they are endangered also in flanke, yea in both flanks, & cannot enter the hollownesse of the front without losse of many of their horse, the depth of the hollownesse being as strong (in having the file-leaders in front, and the depth of the file the same) as a square battaile to resist, and the wings plying and infesting them with all sorts of flying weapons: against foot it hath beene used oftentimes, and it is the only forme that the Turks by reason of his multitudes, vseth both with horse and foot against Christians at this day.

The Cressant may be framed not onely before fight is begun, but also in the heat of fight: Before the fight, you have an example of the Lacedemonians against *Epaminondas*, which I have cited at large in my notes upon the 30 Chap. *Leo* also setteth downe the manner of casting a Nauy into a Cressant before fight. During the fight, *Aratus* the elder framed a Cressant against the Lacedemonians: *Pausanias* reciteth it in this manner; In the battaile of the Lacedemonians against the Mantinians, The Mantinians, *scilicet*, had the right wing, all the rest of the Arcadians the left. The one side was assigned to *Aratus*, and to the Sicyonians, and *Acheans*. *Agis* King of Lacedemon, and the Lacedemonians stretched out their battaile to invade the front of the enemy. *Agis* and his troops stood in the middlest. *Aratus* after he had imparied his purpose to the Arcadians, saved himselfe, and with him that part of the army which he commanded, as if he feared the imprisonment of the Lacedemonians; in giving backe hee brought the army into the forme of an halfe moone. The Lacedemonians and *Agis* thinking they had the victory in their hands, pursued *Aratus* and his troops more eagerly. The wing followed the King, esteeming it no small conquest to have foyled *Aratus*. In the same time they perceived not the Arcadians that were at their backe: and the Lacedemonians being encompassed round about, lost both many other of their army, and *Agis* also their King, the sonne of *Eudamidas* was slaine. *Leo* also in sea-fight giueth his Generall counsell how to entrap his enemy with aiew of flight; in giving backe with fashioning an halfe moone: These be his words in effect; *scilicet*, If a Generall be to retire before the enemies Nauy, let him retire, fashioning his Nauy into a battaile *Menocides*, and sailing with his poppes forward, and so seeme to shunne the enemy: For if he flye not, but retire fighting, hee shall have his ships ready to turne upon the enemy with their poppes bent against him. And if need require, he may retire with his poppes toward the enemy: for the enemy shall not dare to enter into the hollownesse (for feare of being encompassed). So *Leo*. The *Menocides* therefore may be framed during fight, but this caution is to be remembered, that in sudden transmutions of battailes, you vie not the seruice of raw souldiers, but of such as haue experience, lest all be brought into confusion, and the enemy charge you while you are changing your forme. Now as formes of advantage are to be fought against the enemy; so is it needfull to aduise what best opposition is to be made against such battailes: in case the enemy vie them. The Rombe of horse was of old time accounted a forcible figure against foot; the horse therein had the better. The *Menocides* was inuented to resist and ouerthrow the horse: The foot had beene the better; what was then best for the horse? to abstaine from charging (saith *Ælian*) and to ply the foot with misfue weapons, to the end to force them to break

their

their strong forme of embattailing. So now they stand upon equal tearmes and the foot can with their shot annoy the horse, as well as the horse can annoy the foot. *Ælian* then sheweth a meanes for the horse to auoide the danger of this manner of embattailing: for foot vying this forme against foot, hee sheweth no remedy. I will set downe what I finde: and here I neede not to repeat the remedy, that *Epaminondas* vied against the Lacedemonian halfe-moone: it is related at large in my Notes upon the 30 Chap. *Oronfan*. der giueth this aduise: Divide your battaile, saith hee, into 3 parts: with the two outwardst charge the Enemies wings: the third that is ordered against the middle, and as it were, the bosome of the Cressant, aduance it not, but let it stand firme; for either they that are placed in the middlest of the Cressant, shall stand idles, or else aduancing in an euen front, will throng one another and breake their battaile. For the two fronts fighting in the wings and keeping their place, it is not possible for the halfe circle to come forward with an euen front: when they are therefore confused and haue broken their array, let the third battaile that remained in the middlest for seconds, charge them, as they disorderly aduance. If they still keep their place in the bottome of the hollownesse, oppose the light-armed and darters against them, who will exceedingly distresse them with their misfue weapons: likewise you may doe well to frame a Loxe-phalange of your whole Army, and with your two Loxes, charge the wings, preuenting so the circling and encompassing of the *Menocides*. For the Enemy, being a long while hindered from coming to blowes with his whole Army, shall be kept in play with a few, none fighting but those onely that are in the wings, which first of necessity must toyne, because of the oblique onsets. It will not bee a misse also, wisely to retire with the Army sometimes, as though you were in feare, or else facing about to make your retreat orderly, as if you fled; and afterward turning suddenly to meete the Enemy that presseth upon you. For sometimes the Enemy being once-joyed in the imagination of a true flight, doth follow vnadvisedly, and make a disorderly pursuit; every man pressing to be first, upon whom you may returne without danger, and againe, chuse them that follow you who will be fricke with a fear in that you are contrary to their expectation, turne again & make head against them. *Oronfan* der giueth here three wayes to resist the *Menocides*: one by diuiding your battaile into a Triphalange, & opposing two phalanges against the two wings of the Cressant, forbearing and standing firme with the third till opportunity be to moue (which is the battaile that *Ælian* opposeth against the Carlembolos.) The second by vying the Loxe-phalange against it, as did *Epaminondas* at the battaile of *Leuttra* against the Lacedemonian halfe moone, as I haue shewed elsewhere, namely Chap. 30. §. 7. The third in making semblance of flying; for the halfe moone is a forme, which in standing may well be kept whole, in mouing will soone be broken and fall into disorder, as *Cicuta* an Italian writer noteth very well. If then you faime to flye, keeping your men in order, the *Menocides* following you will breake of it selfe, and so you haue good opportunity to returne, and in all likelihood to win the day against it, especially being in disorder. *Leo* giueth the same aduise to his Generall, onely hee speaketh of Sea matters, *Oronfan* der of Land seruice.

Words of direction for the Rhombe.

For the forming of the Rhombe, see the 19 Chapter, and my Notes upon that Chapter, §. 6.

For

b Diod. Sic. l. 15. 486.
c Oronfan. cap. 66. Leo. cap. 262 §. 184.

a Cicuta de la discipline militaire l. 2. 226.

Leo. cap. 26. §. 291.

c Leo. 19. §. 41.

d Pausanias in Arcadibus 471.

e Leo. 20. §. 101.

The Tactics of Ælian, or

For the Cressant.

First order your body into a long square, Plagiophalanx.

- 1 The 2 file-leaders in the midst of the square, stand.
- 2 The next 2 on either hand, moue forward one foot before the other two, their files moving withall, and holding their distance.
- 3 So the 4 next file-leaders each before other, on either side a foot.
- 4 Then two more on either side, aduance before the rest that moued two foot a peece.
- 5 Then the 2 next on either side, 3 foot apeece.

To restore to the first Posture.

Face about. Moue all at once (excepting the 2 middle files) and take your first ground.

Of the Horse-bataile Heteromekes, and the Plagiophalange to bee opposed against it.

CHAP. XLV.

1 **T**HE horse-bataile Heteromekes is that, which hath the depth double to the length. It is profitable in many respects. (1) For seeming to bee but a few in so small a breadth, it deceiueth the Enemie, and easily breaketh his forces with the thicknesse & strength of the embattailing, and may without perceiuing be led through freight and narrow passages. The (3) foot bataile to encounter is called the Plagiophalange, or broad fronted bataile. For being but slender in depth, it beareth forth and extendeth it selfe in length, so that albeit it be broken in the midst with the charge of Horse, yet is nothing broken but a little of the depth, and the fury of the Horse is carried not vpon the multitude of foot, but freight and immediately into the open aire and field. And for that cause is the length thereof much exceeding the depth.

NOTES.

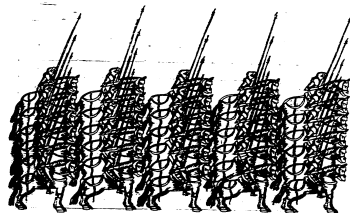
1 **O**F the 2. batailes Heteromekes and Plagiophalanx I haue spoken before in my notes vpon the thirtieth Chapter. The Heteromekes is a kinde of Horse, the Plagiophalange the broad fronted bataile therein mentioned.

2 *For seeming to be but a few.* Amongst all the stratagems vsed in Warre, it hath bene accounted alwayes a master piece of skill to deceiue the Enemie with shew of forces, that are in any Army: sometime with semblance of more men, then wee haue, to feare him, sometime with concealing our number, to prouoke him rashly to fight, and aduenture himselfe in bataile. Of these two kinds we haue an example in *Cesar* at the siege of *Gergonia*.

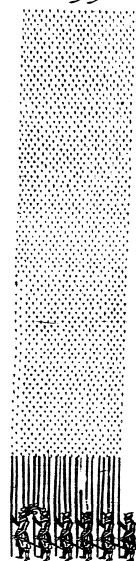
Cap. 45

Plagiophalanx, or of broad fronted bataile of foot

Heteromekes or of Horse of Horse



The front



Gergouia. Cæsar himselfe writeth thus : When Cæsar came into his lesser Campe *Cæsar's lett. cell.*
 (hee had two Campes at that siege) to take view of his workes, he perceived that the
 hill which was holden by the Enemye, was become emptie of men, which hill a few
 dayes past, could hardly be scene for the multitude, that couered it. Maruelling there-
 at, he asked of the run-awayes the cause (of whom great numbers came flocking to him
 every daye.) It appeared by all their reports, which Cæsar also vnderstood by his
 owne Scouts, that the ridge of the hill was almost euen, but yet wooddy and nar-
 rowly which there was access to the other part of the towne. That the Enemye might
 ly feared this place, and were now of opinion, that seeing the Romans had gained one
 hill, if they should lose the other, they should seeme well nigh enclosed round
 about with a trench, and shut vp from issuing out, and from forrage; that all
 gotten this intelligence, sent at midnight diuers troopes of horse thither, and commaun-
 ded them to rid vp and downe in all places with greater tumult, then their manner
 was. Assoone as it was day, hee killed a great number of carriage-horse and Mules
 to be brought out of the Campe, and their pads to be taken off from them, and that the
 Muleters putting on head-pieces, should ride about the hill in shew, as if they were
 horse-men. To these he adde a few Horse, who were to spread themselves abroad here
 and there, to amaze the Gauls the more. Hee will'd them to adresse themselves, and
 to draw to one and the same place, fetching a large compass about. These things were
 scene a farr off out of Gergouia (for from thence the Campe might well be discerned)
 and yet in such distance it could not be certainly perceived, what the matter was.
 He sent a legion along the ridge of the same hill, and placed it (drawing it a little fur-
 ther forward) in the nether grounds below, and hid it in the woods. The Gauls here
 at increas'd their suspicion, and all the forces appointed for the fortifications of their
 Campe were led thither. Cæsar espying the Campe of the Enemye to be void of men,
 conueyed Souldiours stragling, as it were, and not in troopes, from the greater
 Campe vnto the lesser, hiding those things by which they might be knowne, and con-
 ueying their ensignes of Warre, lest haply they might be discied out of the Towne;
 and gaue instructions to the Legats, whom he had let ouer every Legion, what he would
 haue done. After these directions hee gaue the signall: the Souldiours after the sig-
 nall giuen, with all speed fell vp to the Mountain, and entering, made themselves
 masters of three Campes of the Enemye. And the speed of their surprize was such, that
 Theutomarus King of the Nitobrigians being suddenly surpris'd in his Tent, as he
 rested about noone, the upper part of his body being naked, had much adoe to saue him-
 selfe vpon his horse (which was also wounded in escaping) from the hands of the ri-
 sing Souldiours. This example of Cæsar containeth the two kinds before re-
 membered of deceiuing the Enemye. For hee both made a greater shew of
 horse-men, then hee had, by setting Muleters on horse-backe, and giuing
 them head-pieces, and also dissembled the number of them, who were in the
 lesser Campe, which gaue vpon the Enemies workes, by conueying Souldi-
 ers out of the greater Campe piece meale, as it were, and one after an-
 other. The like pollicy yeelded victory to Cæsar against the Gauls before:
 as you may see in the fift booke of his Commentaries. And in this very
 kinde, that Ælian speaketh of, that is in making his front narrow and his
 battaile deepe, and so dissembling his forces, Cleandrides the Lacedæmonian
 wonne a noble battaile against the Thuriens, as I haue noted in the nine
 and twentieth Chapter of this booke. Examples of the manner of these
 flights are euery where to be found in Histories.

The French Cell
 nall.

A people in
 Narbon.

Cæsar de bel. lib.
 l. 5. pag. 74. & 8.

the Art of Embattailing Armies.

thia, the hollow fronted battaile because the circumduction of the front is like an embowing. The end of this forme is to deceiue and ouer-reach the Archers on horse-backe, either by wrapping them in the void space of the front, as they charge, and giue on vpon the ipune, or else disordering them first with the wings, and breaking their fury, by ouerthrowing them finally with their rankes about the middle Ensignes. This kinde of battaile was deuised to entrappe and beguile. For opening the middle hollownesse, it maketh shew but of a few, that march in the wings, hauing notwithstanding thrice as many following and seconding in the reare. So that, if the wings bee of power sufficient for the encounter, there needeth no more: if not, retiring easily on either side, they are to ioyne themselves to the bulke of the battaile.

NOTES.

(1) **A** *Another sort of Rhombocides there is.*] The inscription of this Chapter seemeth not to bee right; because the forme of the Rhombocides here mentioned, differeth not, but is the same, that was last spoken of. In the former hee said it was inuented by *Ileon* the Thessalian, and in vsc^a amongst the Thessalians, and called *Ile* of his name. In this he saith as much, adding onely that *Iason, Medea's* husband; who was also a Thessalian, put it most in practise. So that the Rhombes seeme to be all one, and the inscription of the Chapter either corrupted or mistaken; and that it ought to bee of the Rhombe and the hollow-fronted battaile to encounter it. I need say no more of this Rhombe, the forme of it, the manner of framing, and the difference of it from other Rhombes are sufficiently declared in other places before.

(2) *Against it is opposed the Epicampios Emprothia.*] About the forme of this battaile there is also some difference amongst the learned. *Cassaubon* in his translation of *Polybius* translath^b *Epicampios* in Greeke by the Latin word *Forceps*. Of whose opinion^c *Iustus Lipsius* seemeth to be. If I dissent from so great learned men vpon good reason and authoritie, I hope, I shall not incur the opinion of arrogancy, when I haue spoken, what I thinke, let the Reader iudge, as hee pleaseth: I preiudicate no mans opinion. For the *furcæ* (tonges) or *Forfex* (sheeres) which^d *Lipsius*, and *Cassaubon* hold to be all one with the *Epicampios*, *Vegētius* resembleth them to the letter V. His words are these: *Against it (that is against the wedge) the forme of battaile is opposed, which they call Forfex. For this is a kinde of battaile framed of the choicest Souldiers to the likeness of the letter V, and it receiveth and shutteth within it the wedge. Vegetius* saith, the *Forfex* or *Forceps* is like the letter V. Of this forme is the *Cælembolos* in *Alian*; and resembled to the same letter in expresse termes; as you may see in his thirde fixe Chapter. So that hauing the same forme, it must be the same battaile, howsoever they differ in the Greeke and Latin names. This being so, and seeing *Alian* in this Chapter describeth the *Epicampios* by it selfe, and in another Chapter the *Cælembolos* by it selfe giuing a different forme to them both, there is no probability to thinke they should be one. Now besides the forme here set downe by *Alian*, (which is to bee marked, as it is described,) the description of *Xenophon* shewes the forme of the *Epicampios Emprothia*, out of whose words a man may easily discern, that the *Cælembolos* and it are not all!

one. For he resembleth it to two put together, that is one Gamma on one side, another Gamma on the other. Put therefore two Gammas together in this sort [] and you haue the perfect forme of the Epicampos Emprosthia. The passage is worth the recitall, although it be somewhat long. For it both containeth the forme of the battaile, and the manner of opposition against it. Thus then he writeth concerning the field fought betwixt Cyrus the elder, and Cræsus: *When both the Armies were in fight one of another, and Cræsus being farre superior in number, refused to ouer-front Cyrus his battaile, ordering his owne Phalange in an embowed forme [] for otherwise there is no way to ouer-front and encompasse] he framed it on each side like the letter [] to the end that all his forces might fight at once together. Cyrus seeing this, continued neuertheless his march, and held on with the same pace he had done before, and marking how the Enemy had made [] the inflexion on both sides before, and extended their wings, & doe you perceive, said he to Chrylantas, where they haue made their [] inflexion? Yes, said Chrylantas, and I maruaile at it. For, me thinks, they draw their wings to farre forward from the front of their owne Phalange. True, said Cyrus, and from our Phalange too. But why doe they so? because they feare, lest the wings being nere to us and their Phalange yet farre off, we should gine vpon the wings. But how, said Chrylantas, can they in so great distance second one another? It is euident, said Cyrus, that when their wings shall come vpon, and be right against our flanks, they will turne faces and Phalange wise come against us on all sides, and fight with vs euery way.*

Thus Xenophon of the forme and vse of this battaile; the forme being like two Gammas [], on either side closed, the vse to encompass the aduerse battaile, and to fall vpon it on all sides. And yet the forme and practise of the forme together with the manner to oppose against, will more plainly appeare in the following words: *Cræsus, saith Xenophon, thinking that the Phalange (viz. the middest of the battaile) with which himselfe marched, was neerer to the Enemy, then the wings, which were stretched forth in length, gave a signall to the wings, not to proceede further, but to face to the Enemy in the ground, where they stood, when they had all turned their countenances toward the Army of Cyrus, he gave them another signe to goe and charge the Enemy. So did three Phalanges [] themselves against Cyrus Army, the first against the front, the other two, one against the right-flanke, the other against the left: So that the whole Army of Cyrus were put into a great feare. For as a small Plinthium comprehended in a great one, so was the Army of Cyrus being enuironed euery where with the Enemies horse, and armed foot, and Targetiers, and Archers, and Chariots, fauing onely in the reare. Notwithstanding as soone as Cyrus commanded, they turned their faces against the Enemies: The silence on both sides was great for dread of that, which was expected. But when Cyrus thought meete, he began the Paan, and all his Army answered him. After this they shouted altogether, and Cyrus putting spurs to his horse, with his horsemen gave vpon the Enemies flanks, and with all speed came to hand: The foot presently following in good order wrapped in the Enemy here and there, and had a great dole the better. For they charged the wing in a Phalange, so that the Enemy was fowrdwith put to flight: hitherto Xenophon. In which latter words we may see the forme of the Epicampos more fully expresse. For first hee sheweth that wings of the Phalange of Cræsus were advanced a good way before the front of the Phalange it selfe. Then that the front of these wings advanced, came vp as far as the reare of Cyrus his Phalange. Thirdly, that they marched*

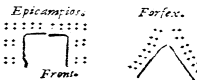
Xenoph. Cyrop. l. 7.
175. 48.

* ΤΗΝ ΕΚΑΤΕΡΑΝ
ΚΕΚΕΚΛΗΜΕΝΗΝ
ΚΕΡΑΤΩΝ
ΕΝ ΤΩ ΕΜΠΡΟΣΤΗΙ

Xenoph. Cyrop.
l. 7. 176. 3.

* ΠΡΟΤΕΡΑΝ
ΕΝ ΤΩ ΕΜΠΡΟΣΤΗΙ

vp in a right line. For Xenophon resembleth Cyrus his battaile to a little Plinthium, the battaile of Cræsus to a great Plinthium, so that both battailes must be square. Scitured on all sides in right lines, as we haue in the 42 Chap. Fourthly, that the front of the Epicampos must be hollow to receive and clasp in, as it were, the aduerse battaile: the two gammæ (whereof Xenophon spake before) ioyned together in the vpper part being a true resemblance of the front of this battell. The manner of the opposition against it is likewise described by Xenophon. First Cyrus staid till the wings of the Epicampos were Front. and turned their faces against his flanks. Then when they were come vp, commanded he his flanks to face toward them to receiue the charge. When the fight was begunne, Cyrus from the reare with reserves of horse and foot gaue vpon the flanks of the wings of the Epicampos (for in the fight, by reason of turning of their faces towards the flanks of Cyrus his Phalange, their flanks were towards Cyrus his reare) and so charging them in flanks and front they were easily defeated. To returne then to the comparison of the *Foreces* and the *Epicampos*, by this example out of Xenophon the difference betwixt them may easily appeare: the *Epicampos* making 2 angles in the bottom of the hollow front, the *Foreces* but one, & the angle in the *Foreces* is acute, the 2 angles in the *Epicampos* both right angles, & the figures differ as much one from another, as the two gammæ ioyned together differ from the letter V.



Ælian in this Chapter sheweth no otherwise of the *Epicampos*, but against horse. But the vse is no lesse against foot, as the former example teacheth, & many other, which are to be found partly in History, partly are mentioned in my notes vpon this booke. A notable experience of this forme you may see noted vpon the 28 Chapter of this Booke, in the fight betwixt Scipio and Asdruball; another in the battaile of *Milvæ* at Marathon, against the Persians: likewise in the battaile of *Argos* against the Franks, of which I shall haue occasion to speak hereafter. For the framing of this battaile the words of direction may be these: First, make a broad fronted Phalange. Then

Antigma sed
this term against
usmet. videret.
Sic. l. c. 686.

- 1 Advance your right and left wings, and let the middest of the battaile stand firme. Under the name of the wings I vnderstand fo many files as shall be thought enough to march out to make the hollow front: the bringers vp of wings must rank with the file-leaders of the middest.
- 2 Face and charge into the hollownelle of the front.

To rest, vnto the first Posture.

- 1 Wings, face about to the right or left hand.
- 2 March and ioine with the body in an euen front.
- 3 Face as you were first.

There is added by some translators of Ælian an *Epicampos opisthia* to the *Epicampos emprosthia*. This battaile they would haue to be signified in their words, *This kind of battaile was devised to misse and beguile*. But hee that shal weigh the words following, shall see that Ælian's meaning is to describe the *Emprosthia* more fully, euen in the selfe same place. For he speaketh

The Tactics of Ælian, or

keth of the few that march in the wings, and of thrice as many that follow in the reare. Besides, he saith, that if the wings be not sufficient to repulse the enemy, they may retire and ioyne to the bulke of the body. The wings are therefore led on first, and the masse of the body followeth, whereas in the Epicampios opisthia the wings are stretched out behinde, and follow the body. And albeit there be in Ælian no words of the Opisthia, yet I may not deny that there is an Epicampios Opisthia: *Suidas* proueth it plainly. He defineth the *Enicampios* thus: It is called *Epicampios* when the battaile advanceth against the enemy, and hath the wings drawne out in length on both sides behind. The vse of the Opisthia is as it seemeth, to avoid the encircling or encompassing of an enemy, that hath a greater quantity of souldiers then we, and means to charge our reare. *Alexander the Great*, being farre inferior to *Darius* in multitude of men, vsed this forme at *Arbela*. *Dionysius Siculus* saith, that after he had ordered his battaile against *Darius* in a right front, hee framed an *Epicampios* behind each wing to the end, that the enemy with his multitude might not encompass the small number of the Macedonians. And this may suffice for both the formes of the *Epicampios*.

Words of direction for the *Epicampios*
Opisthia.


- 1 Advance your body, and let the wings stand firme.
- 2 The wings of one flanke face onward to the right, the other to the left hand.

To retire, &c.

- 1 Wings face as you were.
- 2 March vp, and front with the middest of the body.

Of the foot-battaile called *Cyrtæ*, which is to be set against the *Epicampios*.

CHAP. XLVII.

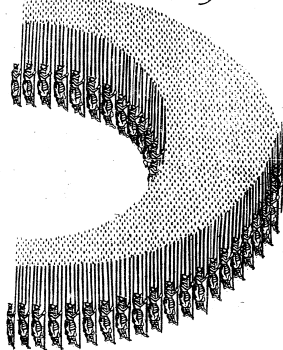
- (1)  HE Battaile to be opposed against the *Epicampios* is called *Cyrtæ* of the circumferent forme. This also maketh semblance of small forces, by reason of the conuexity of the figure. For all round things seeme little in compasse, and yet stretched out in length, and singled, they proue twice as much as they appeared to be. As is euident in Pillars which are round, and therefore in fight shew the one halfe, and conceale the other. The greatest peece of skill in embattailing, is to make thew of few men to the enemy, and in deed to bring twice as many to fight.

NOTES

the Art of Embattailing Armies.

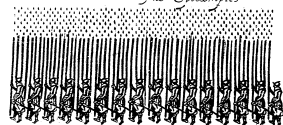
NOTES.

The *Cyrtæ* or conuex half *Moone*.

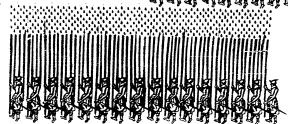
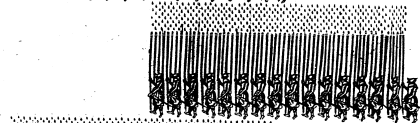


Cap. 47.

The *Enicampios*



The front



NOTES

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C. 3.

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NOTES.

THE forme of this battaille, albeir it be a halfe Moone, and is called by Polybius Menocides, yet is it in a manner contrary to the Menocides described in the 44 Chapter of this Booke. That turned the concavity or hollownesse backward toward the reare, and the two hornes against the enemy, and fought to encompasse, this turneth the conuexe or outward part foremost, not the hornes, and enleauoareth to auoid encompassing: For the Epicampios, if a man should enter into the hollownesse thereof, claspeth him in, and is able to charge him in front, and on both flanks at one time. But the conuexe halfe Moone auoiding that danger, meeteth the enemy with the bearing out of the halfe circle, and giueth the two wings of the Epicampios enough to doe, being not to be annoyed with the depth of the hollownesse, which remaineth a pretty distance more backward then the points of the wings. So that this forme is fit to be opposed against the Epicampios, and looeth no aduantage of embattailing: and it auoideth the perill of the hollow front by not entering, and yet maintaineth the fight against the two wings that are thrust out to encompasse; being of sufficient strength to encounter the Epicampios, either of them not dissoluing their forme, or notwithstanding that the wings of the Epicampios retire, as Aelian prescribeth, when they are ouerpressed, or else the body of the hollownesse aduance to make an equal front with the wings, and so vnite their force. Howbeit I haue not read in the Greeke history examples of this forme set against the Epicampios, or vied otherwise in fight; onely I finde in Polybius at the battaille of Canne, that Hannibal practised it against the Romans, not trusting to the strength of the forme, but rather with the shew thereof, couering a further drift, to beguile and bring them into his snare. His words are in effect these: Hannibal, saith he, embattailed his army thus: He placed on the left hand the Spanish and Celtish horse right ouer against the Roman horse: next to them of foot halfe the Lybian heavy armed; then the Spaniards and Celts, next them the other halfe of the Lybians. On the right wing he ordered the Numidian horse: After he had framed an even front of the whole Army, he aduanced the middle Spaniards and Gauls, and cast them into a conuexe halfe Moone, gathering up the dipple thereof and making it thin, meaning to hide the Lybians with it, and disposing the Lybians behinde them as seconds. And a little after he declareth the manner of fight. Then the heavy-armed foot succeeding the light armed, encountered together. The Spaniards therefore and Gauls a while brauely maintained their order and fight against the Romans; but being ouer-pressed, they turned their back, and retired, dissoluing the forme of their halfe Moone. The Roman Cohors couragiously following easily broke asunder the battaille of the Celts, which at first was ordered in a small depth; themselves transferring the thicknesse of their battaille from the mince of the middle, where the fight was; for the middlest and the wings fought not at the same time. The middlest began the fight first, because the Celts ranged up a halfe Moone but much more forward then the wings, hauing not the hollownesse but the prominent swelling of the halfe Moone lying out toward the enemy. So the Romans following & running together to the middlest where the enemy gave ground, entered so far into the enemies battaille, that they had the heavy-armed Lybians on either of their flanks, of whom those of the right wing sicing to the Target, charged them on the right side of the left wing, sicing to the pike, gave upon their left side, because it self shewing what was fit to be done so that it lacked.

The Tatticks of Ælian, or

as Anniball had foreseene, that after the defeat of the Celts, the Romans pursuing the victory, should fall out to be enclosed in the midst of the Lybians. So Polibius of the prominent halfe moon or Cyrtie, which Anniball vsed, to which of purpose he gaue to make thinnel, because it should be broken & beaten, and the enemy drawn into the snares as it were, and ambush of the seconds, that is, of the Lybian heauy armed. If it had had the due proportion of depth, it might haue stood a longer time against the efforts of the enemy, and disputed the victory against the broad-fronted phalange; against which if it may be opposed, there is no question but it may be set against the Epicampios, because the broad-fronted phalange hath all her forces vnited together, the Epicampios fighteth onely with her two wings, the midst of the battaile being farre from ioynings, vlesse a man be compelled to enter into the hollownesse of the front, in which case both the front and the wings may annoy him.

*Words of direction for the Cyrtie or conuexe
halfe Moone.*

- First, order the body into a long square or Plagiophalange.
- 1 Then let the two file-leaders in the midst of the square march out with their files.
- 2 The next two on either hand moueright forward one foot short of the first, keeping distance in flanke, as before.
- 3 So the next foure, two on each side: the two next one foot short of the last, the other two one foot short of them.
- 4 Then the next foure, two on each side, each two foot short of other.
- 5 Then the foure last, two on each side, each three foot short of the other.

*Of the Tetragonall Horse-battaile, and of the wedge of foot to be
opposed against it.*

CHAP. XLVIII.

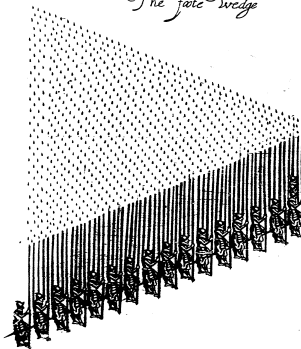
- (1) **T**he Tetragonall horse-battaile is square in figure, but not in number of men. For in squares the number is not alwaies the same: and the Generall for his aduantage may double the length to the depth. The Persians, Sicilians, and most of the Grecians doe affect this forme, and take it to be easie in framing, and better in vse.

(2) Against it is opposed the Phalange called Embolos, or Wedge of foot, all the side consisting of armed men. This kind is borrowed of the horse-mans wedge. And yet in the wedge of horse one sufficeth to lead in front, where the foot-wedge must haue three, one being vnable to beare the sway of the encounter. (3) So Epaminondas the Theban fighting with the Lacedemonians at Mantinea ouerthrew a mighty power of theirs by casting his army into a wedge. (4) It is fashioned when the Antistomus Diphalangy

the Art of Embattailing Armies.
in marching ioyneth the front of the wings together, holding them behinde
like vnto the letter A.

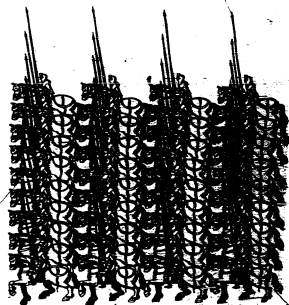
Cap. 48.

The foote wedge



The front

*The Horsebattaile square in figure,
not in horre*




The Tactics of Aelian, or

as Anniball had foreseene, that after the defeat of the Celts, the Romans pursuing the victory, should fall out to be enclosed in the midst of the Lybians. So Polibius of the prominent hope he gave to the enemy drawn in, is, of the Lybian he might have stood at the victory against be opposed, there. because the broad Epicampius fight being farre from the lownesse of the strait noy him.

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the Art of Embattailing Armies.

in marching ioyneth the front of the wings together, holding them behinde like vnto the letter A.

NOTES.

(1) This Chapter containeth the description of two battails, one of horse, the other of foot to be opposed in fight one against another; namely the square of horse, and the wedge of foot. Of which the tetragonall horse-battail, square in figure, or ground (for all is one) is described in my notes vpon the 18. Chapter of Aelian, as also the wedge of horse, from which this wedge of foot (as Aelian saith) is deriued. It will be therefore needlesse to repeat, what is there written about the formes and diuersity of them; or to make comparison of their vse and aduantage. Against the Rhombe of horse, if they come to charge foot, he hath set downe two formes of foot to receiue which vpon this reason, because they are hollow in front both, and the Rhombe thooteth forth and chargeth in a point, must of necessity by receiuing that point into their hollownesse, and plying it with their weapons on all sides, disperse the Rhombe both in front and flanke, which is a dangerous kinde of fight, and such a one as seldom may be tolerated or endured.

(2) Against the square horse battail in figure or ground, he opposeth in this Chapter, the wedge of foot, which albeit it cannot with the like art wrappe it, and so to disorder and deface it. For the square of horse hauing a large front and going with full speed to charge, falleth vpon the narrow front of the wedge, which according to Aelian ought to containe no more then three men, and they knitting themselves close, their pikes pretended and being seconded with the rest of their companions behinde pretending their pikes likewise, receiue the charge with a firme stand, so that onely the middelt of the horse falling vpon the point of their front; cannot reach to the flanks of the wings thereof (because the wedge from the first narrowing groweth backward into an increasing breadth) without breaking of their forme, and altering of the front of their square, wherein they were ordered: which if they doe, their repulse cannot but follow, because they fight out of order. Now that the forme of the wedge in horse is able to endure the shot of the horse, that came against them in a square, appeareth by the 18. Chapter of this booke, where it is laid that Philip King of Macedon, Alexander his father vsed this forme alone, and that Philip King of Macedon, Alexander his father vsed this forme alone, and that Alexander himselfe ordered his horse in the same manner, who were both victorious in all their fields. That it is as good for foot against horse, besides the reasons before rehearsed may be euident by this, that the horse are in motion in the charge, and by that meanes are soone disordered, whereas the foot stand fast and keepe themselves secure to repulse the violence of the horse.

3. So Epaminondas the Theban] This battail is excellently described by Xenophon in his seuenth booke of his history of the Grecians. His words found thus: After Epaminondas had embattailed his army, as he thought fit, he led not straight way against the enemy directly, but declined westward toward the Tegan mountains lying right over against the enemy, which bred an opinion, that he had no will to fight that day. For after he came up to the mountains and had ta-

a Xenoph. Hellen.
l. 7. p. 645. D.

b. 10m. 2d. 30m.

• 2d. 10m. 2d. 30m.

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• 2d. 10m. 2d. 30m.

Phalanx.

ken a view of his army, he caused them to lay down their arms in the uppermost part of all, as if he meant to incampe; and by this means allayed the preparation of fight, which most of the enemies had conceived in minde, and likewise their care in maintaining their place and order in battaile. After steering vnto the front, his companies that marched in a wing, hee fashioned his whole army into a strong wedge. Then commanding them to take vp their armes, he led on, and they followed. The enemy seeing him advance contrary to their expectation, had no leisure to be still, but some came to their place in battaile, some embattailed themselves, some bridled their horses, some put on their curaces: all were like to men, that were like rather receive, then give a foyle to the enemy. Epaminondas led on his army like a galle with the prow against the enemy, imagining that where soeuer he should breake their array, he should thereby ouerthrow their whole army. For he refused to bring the best and strongest part of his army to fight, casting the weakest behinde in the reare, knowing that but if he defeated they would discourage their owne side, and breed new courage in the enemy. The enemy ranged his horse like a phalanx of armed foot in a great depth without saying foot with them. But Epaminondas made a strong wedge of his horse also allotting them foot which had no heres, conceiuing that cutting asunder the enemies horse, he should easily ouerthrow their whole army. For you shall hardly find any, that will make good their ground, after they see them of their owne side take themselves to their feet. And to the end, to withhold the Athenians from succouring those of the left wing next vnto them, he placed both horse and foot right over against them upon the hills, to put them in feare of charging their reare, if they came out vnto the enemy, to led he on to the charge, and was not deceived of his hopes. For hauing the better where soeuer he came on, he put the whole army of his a'ner sakes to flight. So Xenophon: Where you may note not only a square of horse defeated by a wedge of horse, but also a square battaile of foot defeated by a wedge of foot. And to shew more plainly, that the forme of the wedge is forcible against a broad fronted Phalanx, I will recite two examples more. The first is out of T. Livius, who writeth of a battaile fought betwixt the Romans and Celtiberians thus. The Celtiberians knowing that the Roman army hauing spoiled their country, would retire through a forrest called Manlius his forrest, but themselves of purpose, to the end to fall vpon the Romans vpon advantage, and emboldened. When the Roman army had entered the forrest by day-light, the enemy rising vpon his ambush vpon the sudden assailed them on both flanks. Which Flaccus (hee was the Roman General) seeing, stirred the tumult by the Captaines commanding euery man to his place, and arming, and bringing the baggage and carriage beasts together, he constantly and without feare embattailed his army partly by himselfe, partly by his Legates and by the Tribunes of the soldiers, as the time and place required. The enemy came on, and the skirmish was attached in the uttermost parts of the Roman Phalanx, and at last the battaile ioyne. The first he was hot in all sorts, but for some diuers: for the Legions behaved themselves brauely, and the auxiliaries in both wings as well. The mercenaries were hardly laid vnto by the enemy (who bore the like armes, and was a better kind of soldier) but had much ado to make good their ground. The Celtiberians when they saw they could not match the legions in the ordinary manner of fight, and Ensigne against Ensigne, cast themselves into a wedge, and so assailed the Romans in which kind of fight they are so powerful, but they are scarcely to be resisted. Then the legions also braced, and the battaile was almost broken. Which danger when Flaccus perceived, he rode to the legionary horse men And is there no hope in you said he? This army will immediately be lost. When they cryed out at all hands,

hands, they would gladly doe what soeuer he commanded. Double the troopes, said he, of both legions, and with all your might force your horse against this wedge of the enemy, wherevnto they presse vs: you shall doe it more violently, if you give on, drawing off the horses bridles, which the Romans horsemen haue often done heretofore to their great commendation. They obeyed, and pulling off their horses bridles they passed & repassed through the enemies wedge twice with great slaughter, euery one breaking his staffe. The Celtiberians after the breaking and dispersing of their wedge, in which all their hope remained, began to be afraid, and almost quiting the fight, sought where they might best to save themselves. Titherto lay. In which passage a man may observe full power to breake and dispart any square it shall fall vpon. The other example or precedent is out of Agathias, where he describeth the battaile betwixt Narces (the Emperour Iustinius Lieutenant) and Buccelinus General of the French-men. He hath thus. Narces when he came to the place where the fight should be, ordered presently his army into a Phalanx. The horse were ranged in the wings; himselfe stood in the right wing, and next him Zandalas Capitaine of his followers, and with him all his mercenary and household seruants; that were not right for the warre, on either side of him was Valerian and Artabanus, who were commanded to hide themselves a while in the thicke of the wood, that was thereby: and when the enemy toyne, to fall out suddenly and vnlooked for vpon them, and to put them into an amazement. The foot had all the space in the midst, and the file-leaders ioyne shoulder to shoulder being armed with curaces and other pieces of armour reaching downe to the foot, and with caskes: behind them were other shouldiers ordered even as farre as to the open fields. The light armed and such as used flying weapons were cast in the reare expecting a signall of employment. The middelt was reserved for the Heruli, and remained empty, because they were not yet come up: Buccelinus advanced his battaile, and all ran cheerfully against the Romans, not leschurly, and in good order, but rashly and multumously, as if with the very cry they would haue rent asunder all that stood against them. The forme of their battaile was like a wedge, for it resembled the letter Delta. And the front which shot out in a point, was couered and close, by reason it was hemmed in with Targets (you woul: haue said they committed a swines head) but both the flanks on each side lying on by files in depth, and stretching backward by a fowse, by little and little were parted and suered on from another, and leauing out still toward the reare ended at last in a great distan: so that the ground in the midst betwixt them was empty, and the backs of the soldiers that were in the wedge, appeared cleane through the files vncovered. For their faces were turned contrariwise one from another, to the end, they might beare them toward the enemy, and save themselves from blowes, by casting their Targets before them, and secure their backe by placing them opposite to the backs of their followers. All things fellow according to Narces his wish, to whom both a faire opportunity was presented, and who had wisely before contrined what was to be done. For when the Barbarians running on furiously fell vpon the Romans with a shout and outcry giving vp on the midler; they presently broke the front of those that stood in the void place, (for the Heruli were not yet come up) And the leaders of the point of the wedge cutting asunder all that stood in their way, euen to the uttermost depth of the file, and yet making no great slaughter, were carried beyond the bringers up of Narces battaile, and some of them continued their course further, thinking to take in the Roman Campe, Then Narces presently turning about and extending out his wings, and making (as the Tattikes name it) an Epicamptus emprothia, commanded the archers on horse.

• Agathias l. 2. c. 11.

39

Capus percussus.
• Paget 4. c. 19.

horsebacke to send their arrowes by turnes, upon the backs of the enemy, which they easily performed. For being on horsebacke higher then the Barbarian foot, they might at their pleasure strike them, as they advanced forward, being in a great breadth, and nothing to shadow them. Hitherto *Agathias*. It would be long to rehearse the rest of the battaile which he exaggerateth rhetorically. I haue recited so much, as both the weth the strength of the wedge, and withall the manner which was used by *Narsetes*, to ouerthrow it. For I find three kinde of wayes which haue beene practised to resist and defeat it. One by charging it with horse, before it enter the aduerser battaile, as *Flaccus* did against the Celtiberians. The second to frame the aduerser battaile empty in the midst (filling it with some souldiers notwithstanding for shew) and when hee entrench the space, to ply his reare with shot, and charge it thoroughly as *Narsetes* did. The third to oppose against it a hollow wedge (which *Vegetius* calleth forfex) and receiving and letting in the point of this wedge into the hollownesse of the other to claspe it in, and charge it on all sides. Against the wedge saith *Vegetius*, is opposed the battaile called forfex, a paire of sheeres: For it is framed of the best and valiantest souldiers to the similitude of the letter V. and it receiveth in, and embraceth the wedge, so that it cannot breake through it.

4. It is fashioned when the *Diphalance Antistomus*. This manner of framing a wedge is described by *Ælian* in the 36 Chapter: and yet that wedge set downe there openeth in front, keeping the reare shut, and is opposed against the right induction, and called *Cælembolos*; here the wedge is described that openeth the reare, keeping the front close, and is opposed against the square. But the manner of framing both standeth vpon one reason: For the file-leaders being placed within the *Cælembolos*, the front of the battaile is opened and the reare kept close: in the other, the file-leaders being without, the reare is opened, the front still maintained shut. Now the file-leaders place is varied in either of them, because of the severall effects which they worke. The hollow fronted wedge *Cælembolos* seeketh to hold the enemy together, & so defeat him. The other to dispart and rout him, and so to gaine the victory. And because the streffe of the *Cælembolos* is within (for the flanks of the hollownesse claspe in the enemy, and fight against his flanks) therefore are the file-leaders the foremost that fight within; as likewise because the outsidess of the wedge of this Chapter beare all the weight of the fight, therefore in it are the file-leaders without. For as in all other battailes the file-leaders ought first to attach the enemy, so it is likewise in these two formes. But where *Ælian* saith, that this battell is made out of the *Diphalance Antistomus*, by ioyning the wings in front, and opening them behinde, I take the Text to be corrupted. For the *Diphalance Antistomus* hath the file-leaders within, to resist the horse that charge them, as the 40 Chapter teacheth this hath the file-leaders without to breake the enemies battaile and disseuer it. The *Cælembolos* indeed is framed out of the *Diphalance Antistomus*: But the wedge of this Chapter springeth out of the *Phalange Antistomus*, which hath the file-leaders without. And so I am of opinion, it ought to be read in the Text. And yet there is no question but another way of figuring the wedge may be practised, then to leave it hollow behind. In this Chapter it is called *Embolos*, and *Ælian* saith it is borrowed of the horse-wedge: Now that the horse-wedge is so-

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of battaile is set the
that with the vne-
pe with them; and
the same. And the
file-leaders of the
fight secret, they
leaders sever them.
likewise be ready to

be opposed against
are; the second the
hath beene: And by
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all sides. It is called
d more particularly
he hath the likenesse
thin, as I have noted
Plutarch saith, that
om the Indies quæ-
hollow forme, and
water the Rhodian
of the *Pleisium*. But in

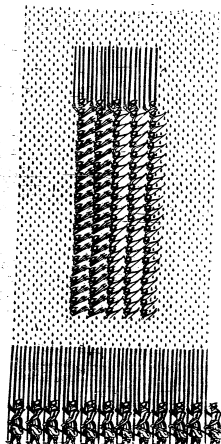
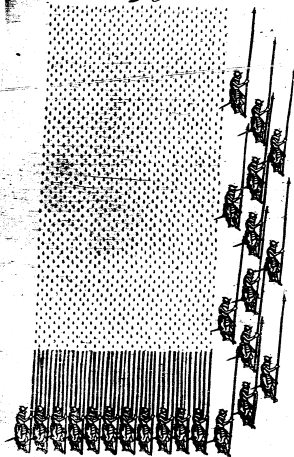
length of a battaile,
the point of one
from the front to
length or breadth
so; for oftentimes
wife that the Ple-
sium

The Peplemene

Cap. 49

The Pleium

The front



the Art of Embattailing Armies.

lid, and not hollow within, is plaine by the 19 and 20 Chapters of this booke. I will conclude this Chapter with the caution of *Pegerius*, which is this, that if you shall make a paire of tongs or a hollow wedge, you ought frame your tongs or wedge. And yet this caution holdeth not alwayes; For as a hortic-wedge, so a foot-wedge may be framed without supernumeraries: as the 19 and 20 Chapters shew.

Of the foot-battaile called *Pleium*, and of the Winding or Sawe-fronted battaile to encounter it.

CHAP. XLIX.

(1) HE battaile *Pleium* hath the length much exceeding the depth. And it is called *Pleium* when armed foot are placed on all sides, the archers and slingers being thrown into the middle. Against this kinde of battaile is set the winding-fronted battaile, to the end that with the unequal figure it may traine out those of the *Pleium* to cope with them; and by that meanes disorder the thicknesse of the same. And the *Pleium*, that if they still maintaine their closenesse and fight secret, they also encounter them in the like forme. If the *Pleium* file-leaders feare themselves and spring out from their maine force, then they likewise be ready to meet them man to man.

NOTES.

THis Chapter containeth two foot-battles, one to be opposed against the other; the first called the *Pleium*, or hollow-square; the second the *winding-fronted-battle* or *Peplemene*. Of which the first hath bene used by all antiquity, especially by the Grecians, whensoever the enemies were topped in number, and they feared to be charged on all sides. It is called *Pleium* of the figure which is square; but originally and more particularly of the mould; as being both square, and also hollow within, as I have noted before. Neither is this name given to a battaile alone; *Plutarch* saith, that the chariot wherein *Alexander* rode, when he returned from the Indies quaffing and rioting, was framed in *pleium*, that is, in a square hollow forme, and the *Helepolis* (an engin which *Demetrius* invented to batter the *Rhodian* City) was tetragonall, and had 48 cubits in every side of the *Pleium*. But in a battaile, that is *Pleium*, saith *Alian*, which

2. *Hath the length manifestly exceeding the depth.* The length of a battaile, as I have shewed heretofore, is that which runneth from the point of one wing to the other in front; the depth, that is measured from the front to the reare. In the *Pleium* then, according to *Alian*, the length or breadth ought to be manifold to the depth. But it is not generally so; for oftentimes you shall read of *Pleiums* with equal sides; and likewise that the *Pleium*

^a *symplegma*, compo-
sum in *orthogono*.

^b *pleum* in *vita* *Alexandri*.

^c *pleum* in *vita* *Dionisii*.

^d *pleum* in *vita* *Dionisii*.

^e *pleum* in *vita* *Dionisii*.

^f *pleum* in *vita* *Dionisii*.

^g *pleum* in *vita* *Dionisii*.

* Xenoph. d. cap. 1.
164. d.

sum is sometimes hollow within, sometimes solid and filled vp within with men: of which last kinde * Xenophon saith, many of the Barbarians framed their troopes in the battaile betwixt Artaxerxes and Cyrus. Of the first Ælian speaketh in this Chapter: for he would haue the foure sides to consist of armed, and the archers and slingers to be throwne into the hollownesse within. He hath before in the 42 Chapter described the Plinthium to be a square battaile in figure and number; this he would haue to be a square with the front manifoldly longer then the flanke. So that both battailes agree in that they are square, both in that they haue armed on all sides, both in that they are hollow within; they differ onely in the forme of the square, which is longer in the Plesium, deeper in the Plinthium. Their affinity also appeareth in this also, that the Plinthium hath the name from a bricke, the Plesium from the mould of a bricke; yet are their names oftentimes confounded. For that which is called in one Author Plesium, is in another called Plinthium: as namely the battaile of Antony in Persia, is by Plutarch named Plesium, by Appian Plinthium.

* Plut. in Antony.
* App. in Path.
165.

To shew now the vse of this battaile, it is of the kinde of Defensives; and the Grecians, whensoever they feared to be charged in flanke, front, and reare at once, or to be ouer-laid with number of enemies, had recourse vnto this forme. There is a notable example of it in Thucydides. The Athenians having besieged Syracuse in Sicill both by Sea and Land, and being overcome in two battailes by Sea, thought to march by land to some one of their confederate Cities in the Island; and fearing to be round beset by the Syracusians in their way, Nicias one of the Athenian Generals put his part of the army in a Plesium, and so marched before: Demosthenes the other Athenian Generall, followed with the other part of the army in the same forme. The armed rooke into the hollownesse of their battaile: the carriage and vniuersall multitude. When they came to the foord of the river Anapri, they found the Syracusians and their allies embattailed there, whom having beaten from the place, they passed over and continued their march. The Syracusian horse still charged, and the light-armed ceased not to ply them with misse weapons; but yet they came not to hand-blows, fearing to hazard against men desperately bent to sell their lues deere. At last wearying them with many dayes skirmish, and disordering their army, they forced them to yield. This History is at large set downe by Thucydides. I haue abridged it, lest it should take vp too much roome; and yet haue expressed both the forme in his words, and further the meanes, that the enemy vsed to breake it, and to get the victory. This forme was vsed by the Grecians at their returne out of Persia, after that Clearchus and the other Coronels were enslaved by Tissaphernes, and put to death: and againe by Xenophon, when he retreated, after he had failed of the taking of Asidates prisoner, not farre from Pergamus a City of Lydia. For the meanes to dissolue this battaile, the principall is, not to charge at hand those that stand so embattailed, but to ply them farre off with misse weapons; which is manifest by the fight of the Syracusians against Nicias and the Athenians; and by that of the Persians, who so assailed Xenophon in his retreat last mentioned. Ælian setteth against it another forme of battaile which he termeth Plegmene, the winding fronted battaile, which is by force called the save: what kinde of battaile the save is, I see controuerted. Some would haue it consist of a constant front indented, and not changeable or alterable in any part, during the charge. If that be the law, it cannot agree with

* Thucyd. l. 7.
166. c.
These two Generals had each of them half the Army vnder their command.

* Xenoph. d. cap. 1.
163. 303. E.

plegmene to traine
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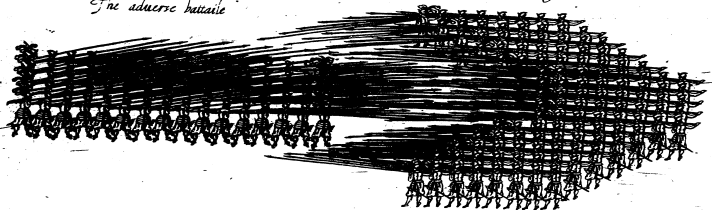
attailes, are
of more effi-
of the other,
ge to them,
that haue aduantage in numbers of men, and can frame a larger fronted
Phalange then the enemy is able. And either of them opposeth a large front
against the enemy, the one stretching it beyōd the points of both their wings
the other beyond the point one of their wings. The first kind is called Hy-
perphs.

that haue aduantage in numbers of men, and can frame a larger fronted
Phalange then the enemy is able. And either of them opposeth a large front
against the enemy, the one stretching it beyōd the points of both their wings
the other beyond the point one of their wings. The first kind is called Hy-
perphs.

Cap. 50

The aduerse battaile

The ouerfronting battaile



which he termeth *Peplegmene*, the winding fronted battaile, which is by ionie called the *fine*: what kinde of battaile the *fine* is, I see controuerted. Some would haue it consist of a constant front *indented*, and not changeable or alterable in any part, during the charge. If that be the law, it cannot agree with

the Art of Embattailing Armies.

the *Peplegmene* who would haue the file leaders of the *Peplegmene*

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yto dissolve the
uallie against the
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de files will moue
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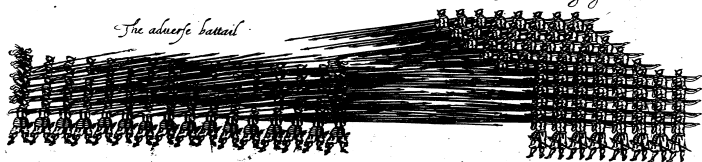
both wings of the
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r. So that he that
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bered vp, and in

Two kinde of battailes set forth, which are (if I mistake not) of more effi-
cacy, I am sure, such as haue beene more praised, then any of the other,
that goe before in this booke; and they specially giue aduantage to them,
that haue aduantage in numbers of men, and can frame a larger fronted
Phalange then the enemy is able. And either of them opposeth a large front
against the enemy, the one stretching it beyond the points of both their wings
the other beyond the point one of their wings. The first kind is called *Hy-*
perph:

Cap. 50.

The adverse battail

The overswinging battail



which he termeth *repente*, the winding fronted battaile, which is by some called the *save*: what kinde of battaile the *save* is, I see controuerted. Some would haue it consist of a constant front *indentid*, and not changeable or alterable in any part, during the charge. If that be the *save*, it cannot agree with

[illegible]

^a LEO C-20-5-124.

Lipsum de...
om. l. 4. dial. 7.
280

Of Hyperphalangesis, and Hyperkerasis, and of Attenuation.

CHAP. L.

(i) **Y**perphalangesis, or ouerfronting is, when both wings of the Phalange ouer-reach the enemies front.



2 Hyperkeralis, or ouerwinging, is when with one of our wings we ouer-reach the front of the enemy. So that he that

For they that match not the enemy in multitude, may yet overwing him.
 3 Attenuation is when the depth of the battaile is gathered vp, and instead of 16 a smaller number is set.

NOTES.

IN this Chapter, touching the last, that desidered formes of battailes, are two kinds of battailes (set forth, which are (if I mislike not) of more efficacy, I am sure, such as haue beene more praised, then any of the other, that goe before in this booke; and they specially giue aduantage to them, that haue aduantage in numbers of men, and so frame a Large force, where Phalange then the enemy is able. And either of them stretcheth a large front against the enemy, the one (stretching it beynd the points of both the wings the other beyond the point one of their wings. The first kind is called *Hetero-*

H

perph₂...

Hyperphalangis over-fronting, the other *Hyperkerasfis*, over-winging. *Hyperphalangis* or over-fronting is, faith *Aelian*;

1 When both wings of the Phalange over-reach the enemies front.] To make it then *Hyperphalangis*, the front must be much broader then the enemies, & extended beyond both their wings, of purpose to over-reach & wrap them in, charging not only the front, but also the flanks on both sides at once; which is so dangerous a kinde of fight, that he that is so assailed, can have no great hope of making resistance against his enemy; because the front being the place which is ordained for fight, and the pikes being bent and lying out from thence, if at the same time the flanks be also charged, the sides of the fouldiers must needs lie open to wounds, no man being able to defend himselfe, and turne his weapons two wayes at once. The over-fronting of *Crasus* vsied against *Cyrus*, rehearsed by me in my notes vpon the 46 Chapter, is an eminent example of *Hyperphalangis*, whereby *Crasus* at one instant invaded the front and both flanks of the enemies battaile. The like may be said of the battaile of *Darius* at *Illos* & *Gaugamela*, against *Alexander*; and of *Scipio* against *Aldruball* *Gisgoes* sonne in Spaine; and of *Laetius* against *Caesar* in Africa. The manner of framing this forme is diuers: For either you shew all your forces at first, or else conceale some part; and shewing all, you march in an euen and whole front, and bowing afterward your wings, enclose the flanks of the enemy, or else in on embowed forme at first (such as are the hollow-fronted battailes) and so encompass your enemy, taking him into the hollownesse, as you march forward. Of the first kind was the battaile of *Labeius* against *Caesar* which I mentioned last, and those of *Darius* against *Alexander*; Of marching in an embowed forme, that of *Crasus* against *Cyrus*: Of concealing your number, that of *Cleandridas* against the Thurians cited by me in my notes vpon the 29 Chapter of this booke; and of *Scipio* against *Aldruball* which is set downe at large in the notes vpon the 28 Chapter.

2 *Hyperkerasfis* is when we over-reach the enemies front with one of our wings.] Over-winging is of both wings, over-winging but of one. So that albeit your number be smaller then the enemies, yet if you wrap in a part of his front, and one of his wings, you do overwing him. To shew an example of over-winging you may finde in *Thucydides*, that the Argives with their allies, being in the field against the Lacedemonians and their allies, the battailes were ordered thus: The Lacedemonians gave the point of the left wing to the Scirtes, who only of the Lacedemonians have alwaies that place. Next to them they ordered the fouldiers, that came with Brasidas out of Thrace: Next them the new made Citizens by companies; by their side, first the Thracians, then the Metallans, Arcadians both. In the right wing were ranged on both wings, and a few of the Lacedemonians in the point of that wing. The two sides were ranged on both wings. Thus were the Lacedemonians embattled: Their enemies thus; The Mantineans had the right wing, because the warre was made in their Territory; by them stood the Arcadians their confederates. Then 1000 selected Argives, whom the City had long time trained up in military exercise; to whom toyed the other Argives; and after them were ordered the Cleonians, and the Ononians their allies. The last were the Athenians, that had the left wing, as did their owne horse them. This was the preparation and embattailing of both parties. When they went to charge, the Argives and their allies marched forward with speed and great fury, the Lacedemonians leisurely according to the sound of the sifes, placed

a Xenoph. Cyrop.
l. 7. c. 173.

b Arr. l. 2. c. 5. E. &
l. 3. c. 60. f.
c Polyb. l. 11. c.
64. c. B.
d Liv. l. 8. c. 504. B.
Histories de bell.
Afr. 385.

See Thucyd. Sic of
Philip against
the Illyrians l. 16
pag. 512.

a Thucyd. l. 1.
300. D.
See in the ex-
ample in Xenoph.
h B. c. 16. c. 4.
515. E. 516. A. B.

placed within their battaile, not for any religious sake, but to the end, that framing their motion to the sound of the instrument, they might not in the march breake their order of embattailing, which great armies often doe in advancing, to ioine with the enemy. When they were ready to ioine, King Agis betought himselfe of this stratagem: It is the manner of all armies in the onset to stretch out their right wings, and with them to circumvent and encompass the left wings of their adversaries; because every fouldier carefull of his owne safety seeketh to cover his unarmed side with the target of him that standeth next to his right hand, and imagineth that the sitting of targets close, serves for the best defence against the enemy. The cause is this; the corner file-leader of the right wing desiring to withdraw as much as he can, his naked side from the weapons of the enemy proceedeth to the right hand, and the rest follow him. And at that time the Mantineans a great deale over-reached the Scirtes with their wing. The Lacedemonians and Tegeates much more the Athenians, by reason they over-matched them in number. Agis therefore fearing the encompassing of his left wing, seeing that the front of the Mantineans was very broad, and farre extended, gave a signe to the Scirtes and Brasidians to stretch out their wing, and to equall the front of the Mantineans. And for the void space that should remaine upon their advancing; he commanded two Polemarchs or Coronels, Hipponoidas and Aristocles to lead therein two cohorts from the right wing, and fill up the void space, conceiving that he should, this notwithstanding, leave himselfe strength enough in the right wing, and that the wing opposed against the Mantineans should hereby be better enabled to the encounter. But it happened that Hipponoidas & Aristocles followed not these directions, whether the reason were in the suddennesse of the command, or in the preuention of the enemies giving on: for which fault they were afterward banished Sparta, as men effeminate & cowards, when they came to hands, the right wing of the Mantineans put the Scirtes and Brasidians to flight. And they and their allies, and the 1000 selected Argives falling into the empty space, that was not filled up, made a great slaughter of the Lacedemonians, and encompassing them forced them to turne their backs in huff, and flye to their waggons, and slew also some of the elder sort of fouldiers, that were left for guard there. Ritherto *Thucydides*. I prosecute not the remanent of the battaile, because it is somewhat long. That which I have recited is enough for my purpose, namely to shew the manner of over-winging. Thus then apply it. The Mantineans had their right wing farre extended beyond the point of the left wing of the Scirtes and Brasidians, who by marching out to the left hand fought to equall the front of their adversaries, but left the ground voyd, wherein they were first placed. This ground by Agis his commandment should have been filled by the Cohorts of Hipponoidas and Aristocles. It was not filled, so that in the charge the enemy had the advantage to enter it, and to circumvent on that side the Scirtes and Brasidians, and put them to flight: which danger will be common to all that shall be so overwinged by their enemy. The danger then of over-fronting and over-winging being to great, let vs see what remedies and preuentions against either of them have been deuised by antiquity.

Against over-fronting, they sought to secure the flanks of their battailes, sometimes by ordering their army in such a figure, as should be sufficient to sustaine the charge of the enemy, wherefoever he gave on. Of which kinde is the *Pleum* or hollow-square spoken of in the last Chapter. This was practised by the Grecians at their returne out of Persia; and oftentimes by other Grecians, as is euery where to be found in their histories. And Alexander

Remedies against
over-fronting.

The Pleum.

Epicampos
opithia.
And Sic. l. 17. 593
Att. l. 3. 60. C. 8.

^b Xenoph. Cyrop.
l. 9. 6. A.
l. 10. 1. 14. 5. 8.
l. 11. 1. 14. 5. 8.

Att. l. 2. 31. 36.

^a Cesar de bello
gall. l. 2. 6. 4. 1. 3.
328.

^b Plut. in Sylla. 8.
Appian in bell.
mithridatic.

^c Turkish history
l. 97. 5. 4.

Remedies against
ouerwinging.

^b Alian l. 9. 5. 10.

^a Polyen. l. 1. in
Cleandridas. 5. 4.
l. 10. 1. 14. 5. 8.
l. 11. 1. 14. 5. 10.

^a Xenoph. de exp. l. 4.
l. 1. 1. 14. 5. 8.
l. 10. 1. 14. 5. 8.

The Tactics of Alian, or

ander when he was to fight with *Darius* at Gaugamela (the country being Champagne and *Darius* abounding in multitudes) defended himself with an Epicampos opithia, or a reare-hollow battaile. I haue shewed the manner of it before in my notes vpon the 46 Chapter. And sometimes againe by foreseeing the danger and placing reserves in the reare, or some other secret place to charge the enemy in their flanke, while they busie themselves against your flanks. This ^b was practised by *Cyrus* the elder against *Cressus*, as I haue shewed in my notes vpon the 46 Chapter. Of this kinde also it is, when you lay an ambush to charge their reare, while they charge your flanks. The place will likewise helpe much to auoid encircling. For if the battaile be fought in a freight place by nature, where the enemy cannot draw out his Phalange in length, there is no danger of encircling. So *Alexander* at Issos in Cilicia was freed from encircling, the place being too narrow for *Darius* to bring all his forces into an equall front. The place may also be helped by art in case it be otherwise to open, and fit for the enemy, that aboundeth in number to encompass vs on every side. So ^a *Cesar* being to fight against multitudes of Gauls, drew a deepe trench on both the flanks of his army to assure it from the charge of the enemy. The like did ^c *Sylla* against *Archelaus* the Generall of Mithridats in the battaile Cheronea, and both of them for securing their armies from circumuention, became by that meanes masters of the field and conquerours of their enemies. Of later time ^c *Jo. Huniades* the Hungarian King, being to fight against a huge army of the Turkes, gained a noble victory against them by placing his army on the one side against a fenne, and enclosing it on the other side with his waggons. And these precautions haue bene deuised against Hyperphalanges, or ouer-fronting. Against ouer-winning, they thought it sufficient to strenthen and make safe the wing, that was like to be endangered by the enemy; so that all remedies against ouer-fronting are good also against ouerwinging: but the remedies against ouerwinging are not sufficient to frustrat ouer-fronting. Ouerwinging therefore hath bene auoided sometimes by drawing out the endangered wing in length to equall the enemies wing, that opposeth against it. This is done by doubling of ranks as ^b *Alian* teacheth in the 29 Chapter, and as it was practised by ^a *Cleandridas* the Lacedemonian against the Thurians. Wherein notwithstanding this caution is to be held, that you double not your ranks fo, that you make the depth of your body to thin; for ^c in fo doing your body will be as subiect to breaking for want of depth as for want of length to ouerwing. Beside, it is done by facing to the hand, where the enemies battaile ouerwingeth, and marching out against it paralelly, till your wing equall the wing of the enemy: but so notwithstanding that the void space, from whence you drew your wing, be filled vp, for feare the enemy giue in to it, and distresse you there, as may be seene by the president which in this Chapter I gaue out of *Thucydides* of ouerwinging, and the example of the Colchians, who fearing to be ouerfronted by the Grecians vpon a hill, vpon which they stood embattailed, led their wings to the right and left hand to match the front of the Grecians, leauing the middle of their battaile empty, into which the Grecians conueyng themselves easily put the Colchians to flight, as ^b *Xenophon* recordeth. ^c Ouerwinging is also prevented, if you hold reserves secretly in the reare of your battaile to flye out vpon the sudden against those for-

ccs

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ces of the enemy, that seeke to ouerwing you. This remedy was vsed by ^a *Cesar* in the battaile of Pharfaly, when *Pompey* hauing abundance of horsemen, fought to circumuent that wing of *Cæsars* battaile, which lay to the open field, and was not guarded with a fence, as the other wing was. For to prevent the charge of these horse, *Cesar* bestowed certain cohorts, who were to hold themselves close in the reare of his legions; not facing as his legions did against the legions of *Pompey*, but facing into the field, from whence he suspected the enemies horse would charge, so that when the horse charged, these cohorts suddenly falling out vpon them, and putting them to flight, were the beginning of *Cæsars* victory. The place also often giueth assurance against ouerwinging, whether it be a riuer or the sea, or a mountaine, or such like, to which you may apply the flanke of your wing. For a riuer, you haue the example of ^b *Clearchus* in the battaile betwixt *Alexandres* and *Cyrus* the younger, in which ^b *Clearchus* ordered his troupes of Grecians on the right wing close to the riuer Euphrates. And when *Cyrus* would haue had him charge the middle of the Persian Phalange, because the King had placed himselfe there: (yet saith *Xenophon*) *Clearchus* seeing the King was farre without the left wing of the Grecians (for the King so much exceeded in multitude, that the middle of his battaile was a great way without the left wing of *Cyrus*) would not withdraw his right wing from the riuer, fearing to be encompassed on both sides.

The like was done by *Alexander* the Great in the Countrey of the Getes: this is the effect of the words of *Arrian*; ^a when they (the Getes) saw *Alexander* industriously aduance his Phalange by the riuers side, left the foot might happily be circumuented and compassed by some ambush of the Getes, and his horse in the front, the Getes forooke also their City, which was not very well walled, sitting many of their children and wives vpon their horses backs, as the horse could carry, and retired into the wilderness a great way from the riuer. By the Sea you may auoide likewise ouerwinging, if you order one of the flanks of your Army close to the Sea side. This was put in vre by *Alexander* when he fought the battaile against *Darius* at Issos in Cilicia. Thus hath *Arrian*; The foot of the left wing were commanded by *Craterus*, but the whole left wing by *Parmenio*, who was enjoined not to forsake the Sea, for feare of encompassing by the Barbarians: for by reason of their number they might easily encircle the Macedonians on all parts. A Mountaine also that is steep, will giue good security to the flanke of a battaile, that may otherwise be encompassed. At the battaile of Platea which was fought betwixt the Grecians and *Mardonius*, *Xerxes* his Generall the Grecian Army consisting of 100000. the Persian of 500 thousand, the Grecians at the first encamped at the foot of the Mountaine Cytheron; but finding the place fitter for the multitude of the Persians, then for themselves, they removed their Campe, and chose a more commodious piece of ground to pursue the small victory. For there was on the right hand a high hill, on the left, ran the riuer *Alopos*. The Campe was pitched in the middle space, which was fortified by the nature and fitnessse of the place of ground. Therefore the straightnesse of the place much fauoured the wise counsell of the Grecians, toward the obtaining of victory. For there was no room for the Persians to extend their Phalange in any great proportion of length; so that many Myriads of the Barbarians came to be of no vse. The Grecians therefore in confidence of the place, aduanced their forces to fight, and ordering themselves according to the present occasion, led against the enemy. *Mardonius* being compelled to

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make

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make a deepe Phalange, ordered his battaile in such sort, as he thought most convenient, and with cries set forward against the Grecians. This example albeit it be a remedy against Hyperphalangeis, or over-fronting, yet because it giueth a safeguard by a mountaine to one of the wings, I take it to be proper enough to Hyperkerasis or over-winging. Besides that, as I before noted, all means that are used to auoid over-fronting, are good likewise for the auoiding of over-winging.

3 *Attenuation is.*] This is nothing else but doubling of ranks: whereof see the 29 Chapter.

Of conueighing the carriage of the Army.

CHAP. XLV.

THE leading of the carriage, if any thing else, is of great (1) importance, and (2) requireth a speciall Commander.

It may be conueighed in 5 manners, (3) either before the army, or (4) behinde, or on the (5) one flanke, or the other, or in the (6) middelt.

Before, when you feare to be charged behinde: behinde, when you lead toward your enemy: when you feare to be charged in flanke, on the contrary side. In the middelt when a hollow battaile is needfull.

NOTES.

* Leo 6.10.5.7.
93.4.

I*S of great importance.*] The importance of disposing the carriage in a march is well set downe by * Leo: You (saith hee to his General) ought to haue a speciall care of your baggage, and not to leaue it at random, but to secure it in the place where it shall be; nor to lead it vnadvisedly into the battaile: For it oftentimes falleth out, that seruants fit for the Souldiers wife, and the souldiers children and kinsmen are amongst it: and if it remaine not in safety, the mindes of the souldiers are distracted with doubtfulness and care and feare of the spoyle thereof: for every man of vnderstanding endeouereth to possesse that which is the enemies, without losse of his owne. This is the aduice of Leo. A pregnant example hereof may be read in Diodorus Siculus his description of the last battaile betwixt Antigonus and Eumenes: In which Antigonus hauing foyled Eumenes horse, sent his Median horse-men, and a sufficient number of Tarantines to invade the enemies baggage: For he hoped (which was true) not to be deserued by reason of the dust, and by possessing the baggage to become vanquisher of the enemy without trauaile. They that were sent riding about the wing of their aduersaries vnperceiued, fell vpon the baggage, which was distant from the battaile about five furlongs. And finding by it a rabble of salte vnfit for fight, and but a few left for gard thereof, putting them to flight quickly (thus withstood) they made themselves masters of all the rest. Eumenes hearing that his baggage was lost, endeouored notwithstanding to renew the fight, in hope by gaining the victory, not onely to preferue his owne baggage, but also to possesse that of the enemy. But the Macedonians refused to strike stroke, alledging that their carriage was lost, and their children and wines, and many other bodies necessary were in the hand:

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hands of the enemy. And sending priuily Embassadors to Antigonus they seized vpon Eumenes, and deliuered him vpon Antigonus possession. Thus much for the importance of assuring the carriage.

2 *Requireth a speciall Commander.*] That the baggage ought to haue a speciall Commander * Leo also affirmeth: * ¶ *Requireth* addeith a gard to the baggage, and * Leo a proper Ensigne, saying: To euery regiment there ought to be allotted a Waggon Master, and a proper Ensigne as well to the horse as oxen, that they may be directed to their owner: by the colours of the Ensigne. * Leo 6.10.5.11. * Leo 6.10.5.12. * Leo 6.10.5.13. * Leo 6.10.5.14.

3 *Either before the Army.*] The first of the fve wayes, by which the baggage is conueighed in a march, is to lead it before the Army; which manner when the enemy followeth, the baggage should be behinde, he would soone your army to succour it. For these fve manners of conueighing the carriage, Leo agreeth with Ælian in these words: Your carriage, saith he, ought to haue a speciall Commander to order and gouerne it: and he is to lead it either before the Army, if you dismarch out of the enemies Countrey; after the Army, if you invade the enemies territory: on the one side or other, where you feare to be charged on the one or either of your flanks; within the phalange, when you haue suffition to be charged on all parts. So Leo agreeing with Ælian. * Leo 6.10.5.15. * Leo 6.10.5.16. * Leo 6.10.5.17. * Leo 6.10.5.18.

4 *Or behinde.*] The baggage is to be alwayes disposed of so, that the enemy is like to giue on behinde: behinde, when he seeketh to affront you to be led behinde the whole army, according to this precept of * Leo: Cause your dragg or regiment (saith he to his General) to accustome their owne baggage, so follow after their regiment with their owne Ensignes, and not to mingle with other. For it is necessary, when the enemy is neither present nor expected in our owne Countrey, to march either by Regiments or else by Formes; and not to gather your whole Army into one place, lest they be easily harued with hunger, or the number be speaking of marching thorow woddy and rough wayes, he hath thus: In case you haue horse or baggage, lead your baggage behinde your Army, and after it the horse, and after them a few light armed targatiers, to be as it were bringers vpon of the march, for feare of vnexpected incursions which oftentimes chance to be made by the enemy. * In another thus: When you enter your enemies Countrey, you shall cause your carriage to march in the reare; but when the enemy draweth nere, you shall bestow it in the middelt of the Army. * And in any case you must haue your carriage, and the Captiues (if you haue any) separated from the souldiers that are to fight, lest if the enemy fall on roundis, they be hindered that are to fight. For the distance that the carriage ought to hold behinde the Army, the same Leo hath thus: if you thinke it conuenient for the carriage to follow the Army, you are to order it a full bowe shot from the Army, and let euery part follow their owne bodies in good array: giuing it such breadth in the march, as the Army possesseth, lest that lying out beyond the breadth of the Army, they become vnconuenient. These are the precepts of Leo concerning the conueighing of the carriage in the reare. For the practise of it you haue a precedent of * Cyrus the elder, which is at large rehearbed by me in my notes vpon the 7 Chapter of this Booke: and another of * Alexander the Great, when he led against the Persians at * Arr. 1.1.4. d. * Leo 6.10.5.19. * Leo 6.10.5.20. * Leo 6.10.5.21. * Leo 6.10.5.22. * Leo 6.10.5.23. * Leo 6.10.5.24. * Leo 6.10.5.25. * Leo 6.10.5.26. * Leo 6.10.5.27. * Leo 6.10.5.28. * Leo 6.10.5.29. * Leo 6.10.5.30. * Leo 6.10.5.31. * Leo 6.10.5.32. * Leo 6.10.5.33. * Leo 6.10.5.34. * Leo 6.10.5.35. * Leo 6.10.5.36. * Leo 6.10.5.37. * Leo 6.10.5.38. * Leo 6.10.5.39. * Leo 6.10.5.40. * Leo 6.10.5.41. * Leo 6.10.5.42. * Leo 6.10.5.43. * Leo 6.10.5.44. * Leo 6.10.5.45. * Leo 6.10.5.46. * Leo 6.10.5.47. * Leo 6.10.5.48. * Leo 6.10.5.49. * Leo 6.10.5.50. * Leo 6.10.5.51. * Leo 6.10.5.52. * Leo 6.10.5.53. * Leo 6.10.5.54. * Leo 6.10.5.55. * Leo 6.10.5.56. * Leo 6.10.5.57. * Leo 6.10.5.58. * Leo 6.10.5.59. * Leo 6.10.5.60. * Leo 6.10.5.61. * Leo 6.10.5.62. * Leo 6.10.5.63. * Leo 6.10.5.64. * Leo 6.10.5.65. * Leo 6.10.5.66. * Leo 6.10.5.67. * Leo 6.10.5.68. * Leo 6.10.5.69. * Leo 6.10.5.70. * Leo 6.10.5.71. * Leo 6.10.5.72. * Leo 6.10.5.73. * Leo 6.10.5.74. * Leo 6.10.5.75. * Leo 6.10.5.76. * Leo 6.10.5.77. * Leo 6.10.5.78. * Leo 6.10.5.79. * Leo 6.10.5.80. * Leo 6.10.5.81. * Leo 6.10.5.82. * Leo 6.10.5.83. * Leo 6.10.5.84. * Leo 6.10.5.85. * Leo 6.10.5.86. * Leo 6.10.5.87. * Leo 6.10.5.88. * Leo 6.10.5.89. * Leo 6.10.5.90. * Leo 6.10.5.91. * Leo 6.10.5.92. * Leo 6.10.5.93. * Leo 6.10.5.94. * Leo 6.10.5.95. * Leo 6.10.5.96. * Leo 6.10.5.97. * Leo 6.10.5.98. * Leo 6.10.5.99. * Leo 6.10.5.100.

the river Granicus, and an infinite number of other examples are to be found in History every where.

5 *Or on the one flanke, or the other.* Aelians precept for disposing of the baggage on the flanks, is very good: For it ought as much as is possible, to be preferred from the touch of the enemy; neither can there be any better way to secure it, then your opposition, the Army betwixt it and the enemy; but so, notwithstanding that it have a guard about it at all times, to save it from the sudden invasion of your enemies horse. If therefore the enemy appear on your left flank, your baggage is to be couched on the right flank. If contrariwise the enemy come on to charge your right flanke, the baggage is to be removed to the left. And this holdeth, onely when the enemy appeareth vpon one flanke, and not on both. But in case the enemy appear on both flanks at once, then is the safest place for it,

(6) *In the middelt.* There are two manners of leading of the baggage in the middelt, and that according to the nature and condition of the ground, where our army marcheth. If therefore the way be straight, Leo giueth this precept, *I hope that leads their army through streights, hauing with it either baggage or prey, ought to diuide it into a diphalange, and to march wing-wise in a right induction.* A right induction, that is, which is narrow in front, and hath the depth stretched out in length: And this is to be done especially when there is a prey in the hands of the army. And if they consist of foot, the passage will be the easier through rough and cumber some places. If horse, we, are to alight and take the baggage and carriage into the middelt. But in such times and places, you are to appoint some chosen men onely for the defence of the prey, and to order them upon the four sides of the Diphalange, as the place will giue leave, to the end to follow it and repulse those of the enemy that offer to charge or distract it. And the battaile (or diphalange) so ordered for the preservation of the carriage or prey, bee maintained whole and entire. For it is not possible for those of the Diphalange both to defende it as they in good order, and to ioyne with the enemy that chargeth, which is the cause that there ought to be extraordinary men to march without the four sides of the army; but especially you are to appoint the best of them to war vpon the reare. For so may at all times, rough and trouble some places be passed through with safety. This is Leos precept for streight & narrow passages: because in such you cannot forme your army into a hollow square, wherein the baggage is to be couched, and to be defended on all sides. For if the ground be open enough to cast your selfe into a square, hee holdeth the forme the safest to giue security to your baggage. These be his words:

Place all four carriage, seruants, and baggage, and provisions, in the middelt of your army. And in another place, speaking of a retreat to be made after an overthrow receiued, he writeth thus: *You shall order your whole power into two Phalanges or battailes, or into one square Plinthism; in the middelt wherof you shall put the carriage, beasts, and baggage, and without them the souldiers in order, and without them the archers, and so retire and depart in safety.* Againe he saith, *In marches, the enemy approaching, it is necessary to haue your carriage in the middelt, left being vnguarded, it be spoiled and rifled.* With Leo doth Xenophon agree. His words haue this heve: *I will not wonder if as fearfull dogges are wont to follow and bite such as passe by, if they can, and to flye from such as follow them, so the enemy haue vpon our reire. Therefore we shall perhaps march the safer, if making a Plestium of the armed, the carriage and vnguarded multitude be throwne into the middelt for more security. And if it be now determined who shall command the front of*

the

the Plestium, and who the two wings, and who the reare, wee shall not need to confesse when the enemy approacheth, but execute that which is resolved vpon. This is Xenophon counsell for the march in open ground, when the enemy aboundeth in number of souldiers: which counsell was often put in practice, and the Grecians being but 10000 secured themselves against infinite multitudes of the Persian horse that charged them on all sides, and also preferred, and led their carriage safe in despite of the enemy. The like was practised by Xenophon afterward in the last warlike action of the Grecians in their returre out of Persia. He setteth downe the history after this manner; *Now was it time, viz. after they had assaulted a fort in vaine, the enemy of the country gathering head, to thinke vpon a safe retreat, and conueying the axes and sheep they had taken, and likewise the slaves into a Plestium, they quickly disappeared, not so much fleeing their prey, as fearing in case they left it behind, their departure might seeme a plaine running away, and the enemy gather heart, the Grecian souldiers be discouraged. So now they departed fighting as it were about the prey. The souldiers with Xenophon being sorely annoyed with bowes & slings, cast themselves into a ring to the end to oppose their targets against the shot of the enemy, and with much adoe passed the river Caius, the one halfe of them being wounded. Agasias also the Sympthalian Capitaine was hurt whilest hee maintained fight with the enemy, during the wholeretreat. Yet they all returned safe to the Campe bringing with them about 200 slaves, and sleepe enough for Sacrifice. Here Xenophons souldiers figured themselves first into a Plestium couching their prey in the middelt; afterward being overlaid with the enemies shot, they conuered their Plestium into a Ring, in which forme they recouered their Campe, notwithstanding the molestation and often charging of a great multitude of horse and foot, that were enemy and followed them. Of the forme of Rings I finde not many examples amongst the Grecians; the Romans vsed them often, when they found themselves encompassed by the enemy, as Vegetius hath; and may bee seene in Caesars Commentaries. And let thus be said of the foure manners of placing the carriage in a march.*

Of the words of Command, and certaine obseruations about them.

CHAP. LII.



At of all, we will briefly reape the words of direction; if we admonish first that they ought to be short, then that they ought to be without double signification. For the Souldiers, that in haste receiue direction, had neede to take heede of doubtfull words, lest one doe one thing, and another the contrary. As for the purpose; If I say *turne your face*, some, it may be, that heare me, will turne to the right, some to the left hand, and so no small confusion follow. Seeing therefore these words *Turne your face* importa generally signification, and comprehend turning to the right or left hand; we ought in stead of saying *turne your face to the right*, to pronounce it thus, *to your pike turne your face*; that is, we ought to set the particular before, and then inferre the generall; for so will all doe alike together.

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The Tactics of Ælian, or

Like reason is, if you say *Turne about* your face, or *countermarch*: for these are also *generall* words, and therefore we should doe well to fet the *particular* before. As *to the pike turne your face about*, or *to the target, turne your face about*. Likewise the *Lacedemonian Countermarch*, not the *countermarch Lacedemonian*: For if you place the word *countermarch* first, some of the Souldiers will happily fall to one kinde, other to another kinde of countermarch. For which cause words of *double sense* are to be avoided, and the *speciall* to be set before the *generall*.

NOTES.

If we admonish first that they ought to be short.] The ordering and motions of an army ought to be quickly performed, the rather because the transmutations of the body and the occasions of them are fudden for the most part. And therefore the meanes to worke the transmutations commanded (these meanes are the words of direction) ought to suite to the nature of the motions themselves, and to be applied to celerity by shortnesse of speech. Short speech is better carried away, and sooner put in execution, then speech that is longer. Yet is not such a shortnesse to be affected, as will bring it to obscurity, according to the saying of the Poet; *Brevitas laboris* — *Obscurus fio*. I labour to be short, and so become obscure. And therefore I take the practice of French Commanders, when they command Facing in these words; *A droite, a gauche*, to the right, to the left, without adding *face*, and likewise of the Netherlanders in imitation of the French *Rechts om, links om*, and of some English in these words; *To the right, to the left*, not pronouncing the motion which is to be made to the hand appointed. These I say, I take to be without the warrant of reason, and of all antiquity, from which Ælian draweth this rule. For the command of *right* and *left* alone sheweth that the Commander would have a motion performed to the named hand, but leaveth uncertaine what the motion should be, so that albeit some souldiers fall to a *countermarch*, some other to *wheeling*, or to *doubling*, or to *facing*, they are to be reputed blamelesse, and to have performed that which their direction willed them to doe, because the command was of moving to the *right* or *left* hand onely, not shewing what motion should be made to either hand. Shortnesse therefore is required by Ælian, but such a Shortnesse as is not wrapped vp in obscurity, and which may fully deliuer the minde of the Commander to the souldiers, which hee hath in exercise. And as the words ought to be short, so ought they to be,

Without double signification.] Where they have a double signification, that is, may be diuerly vnderstood by them, who are vnder direction; some of the souldiers (as Ælian saith) will doe one thing, some another, which must needs breed a confusion in the body exercised. For as vniformity of motion in euery particular souldier preferreth the whole body, and euery ioynt, or part; therof entire, so the dissimilitude of motion in the particulars induceth a disioyning, as it were, & a disorder of the multitude of the whole battaile in generall. To auoid then the inconuenience of double vnderstanding in words Ælian thinketh fit, that the *speciall* word should be placed before the *generall*; and in stead of *Face to the pike*, he would haue the Commander

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mander to pronounce thus: *To the pike face* (that is to the *right hand*:) holding the word *right hand* to be more *speciall* or *streighter* in signification, then the word *face*. Let me haue pardon if I differ from Ælian herein. For hee vnder them mo^{re} particulars. Now considering there are foure motions in the battaile, which cannot be put in vse but by words of direction, to euery of them (as for example *Countermarch* to the *right* or *left* hand, to the *right* or *left* hand, and so of the rest:) it is euident, that the word it stretcheth to them all. So that albeit we retain the rule of Ælian, namely, to set the *speciall* before the *generall*, yet may we very safely from his example, and not onely in *facing*, but also in the three other motions pronounce the direction thus: *Face to the right or left hand, Double to the right or left hand, Countermarch to the right or left hand, Wheele to the right or left hand*: because the word *right* or *left* hand is more *generall*, then any one of the motions. But admit it were more particular, yet the necessity of our language would force vs to forsake this rule of Ælian. For in euery language there is an idiom or propriety of speech, and that not onely in the phrase it self, but also in the very ioyning & tying together of the words of the sentence. So that that which forteth well with one language, will not be received in another. In Greeke, in which tongue Ælian wrote, it foundeth well to place the nowne governed by a verbe, before the verbe it self. So in Latine, Dutch, French, and other tongues. In English if a man should doe the like (vnlesse it were in verse, wherein the number of the feet is more respected then the ordering of the words) he should be accounted ridiculous or vaine. For take the example here set downe, to the *right hand face*, to the *right hand double*, or *countermarch*, or *wheele*, and let vs vie the same order of words in common speech, and a man say to his seruant: *To the Church goe, to the mill come carry, bootes cleane make*. To the cutler my rapier carry: vho would not laugh at his speech, or thinke him idle in so pronouncing. Wherefore albeit Ælian hold that forme agreeable to the Greeke tongue, yet I cannot see how it will be fit that our English, according to which I hold it better to pronounce after this manner: *Face to right hand, Countermarch to the right hand*, and so in the rest, then after this, *To the right hand face*, to the *right hand countermarch*; the rather because the property of speech aualeth much to the capacity of souldiers, who for the most part are vnlearned, and will hardly vnderstand, in case the wonted custome, and ordinary vie of ioyning words be inuerted.

CHAP. LIII.

BVt about all things silence is to be commanded, and heed giuen to directions, as Homer especially signifieth in his description of the Græcian and Troian fights, saying:

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*The skilfull Captaines pressed on, guiding with carefull eye
Their armed troopes, who followed their leaders silently;
You surely would have deem'd each one of all that mighty throng
Had beene bereft of speech, so bridled he his headfull tongue,
Fearing the dread Commanders cheeke and dreadfull becks among.
Thus march'd the Greeks in silence, breathing flames of high desire
And fervent Zeale to backe their friends, on foes to wreake their ire.*

As for the disorder of the Barbarians he resemblance it to Birds, saying:

*As fowles of fowle, Geese, Cranes, and Swans with necks far stretched out,
Which in the stony sens Caisters winding streames about,
Sheere here and there the liquid skie, sporting on wanton wing,
Then fall to groun with clanging noise, the sens all over ring.
None otherwise the Troians fill the field with heaped sounds
Of broken and confused cries, each where tumults abound.*

And againe:

*The Captaines marshall out their troopes ranged in goodly guise,
And forth the Troians pace like birds, that lade the ayre with cries.
Not so the Greeks, whose silence breathed flames of high desire,
Fervent in zeale to backe their friends, on foes to wreake their ire.*

NOTES.

Silence when a battaile is put in order either for fight, or exercise, is one of the principall points of obedience, which belongeth to a souldier, the breach whereof more endangereth the proceeding of warre, then a rawe souldier would thinke, who onely is wont to offend in that kind. I haue before entreated of signes, and shewed, that in the obseruing of directions consisteth the greatest helpe of victory; in neglecting them, the chiefeft meanes to take an ouerthrow, and be defeated. For as directions being executed giue life vnto warlike actions to effect that which the Commander desireth, so whatsoever hindereth the receiuing of directions, must needs crosse the designs of the Commander, and by consequence frustrate and disannull that which was thought by him most fit to be put in practise either for the good order, or for the preservation of the Army, or else for the gaying of victory: A man that is not attentue cannot marke the command deliuered: Nor can he be attentue, that whilst it is deliuered busieth his head with other thoughts, or else entertaineth his next standers by with talke, a meanes to diuert aswell the speaker as the hearer from that heed which ought to be giuen to directions; inasmuch as no man hath the ability to heare another mans speech, and himselfe take at the same instant, or at the same time to discern two mens seuerall speeches, which are deliuered together. All generals haue held *Silence* a principall point of warlike discipline. And therefore in Commands they make it the first. *Leas* precept is this: *When the troopes are drawne together, and ordered for exercise, let the cryer (for euery company had then a cryer) giue these directions: Doe what you are commanded with silence; keepe your places euery man, follow your colours.* And in another

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ther place he writeth thus: *When your Army goeth out to ioyne with the enemy, there ought to be a deepe silence, For that both preserueth the Army from disorder, and also maketh the directions of the Commanders to be heard with more attention.* And againe thus: *There ought to be as much silence as may be in the Army, and if the bringers vp of any file, heare but a whispering of their fellowes in the file, they are to prick the parties with the points of their pikes, and so to redresse the fault.* Alexander when he was returning from the Countrey of the Taulantians, into which he had made an inrode, found his way beset with enemies, and being to cast his Army into a forme of battaile to fight, he first commanded an absolute silence, and then proceeded to other directions. And for the effect of silence, our owne story hath a memorable example of the Army of Edward the fourth in Barnet field.

As for the silence here prescribed by Ælian, it extendeth not onely to exercise and fight, but oftentimes to the marching of an Army, and to the Campe, as appeareth by the last example, and by *Leas* precept in his eleuenth Chapter. And yet this precept of silence is not inuolubly to be kept in an Army at all times: for there is a time, when the Souldiers ought to giue a generall shout, and cry throw the whole Army, to the end to terrifie the aduerser battaile of the enemy; and that time hath alwayes beene chosen, and by all Nations obserued, when the fight is presently to be vndergone. I neede not bring instances thereof, euery man knoweth it, that is although but meaneily acquainted with History. It is termed in Greeke *diacyon*, in Latine *clamor*. In English a shout of the whole Army; the which being performed, silence is to be restored in as strict manner as before. And thus much of silence. Now followeth the words of direction in Ælians last Chapter.

of the words of direction.

CHAP. LIIII.

THus then are we to command.

- 1 To your armes.
- 2 Carriage away from the battaile.
- 3 Be silent and marke your directions.
- 4 Take vp your armes.
- 5 Separate your felues.
- 6 Advance your Pikes.
- 7 File your felues.
- 8 Ranke your felues.
- 9 Look to your leaders.
- 10 Reare-Commander strengthen your file.
- 11 Keepe your first distances.
- 12 Face to the pike.

Moue a little further.
Stand fo.

- 13 As you were.
- 14 Face to the Tar.

MOUS

The Taſticks of *Ælian*, or

Moue a little further.
Stand fo.

- 25 As you were.
- 16 Face about to the pike.
- 17 As you were.
- 18 Double your depth.
- 19 To your firſt poſture.
- 20 The Lacedemonian Countermarch.
- 21 To your firſt poſture.
- 22 The Macedonian Countermarch.
- 23 To your firſt poſture.
- 24 The Chorean Countermarch.
- 25 To your firſt poſture.

The precepts of the art Taſticks haue I deliuered vnto you (moſt inuincible *Cæſar*) which I make no doubt, will bring to the practice ſafety, and victory over his enemies.

NOTES.

Theſe words of direction here ſet downe, are rather to ſhew the manner of Command, then to expreſſe the iuit number of directions vſed in exerciſe: yet doth *Leo* the Emperour tranſcribe ſome of them, albeit not all, out of *Ælian*; and the laſt in *Leo* hath a mixture of two motions in one direction, being deliuered in theſe words, *τοὺς ἀνὰ τὴν δεξιὰν ἐπὶ τὴν ἀριστερὰν*, which is in Latine tranſlated by *Sir John Chik Laconicus* *ad paſſum triuolue*; and may be thus enliſhed, wheele thrice the Lacedemonian Countermarch to the right hand; wherein there is both *wheeling* and the *Lacedemonian Countermarch* commanded at once, a thing impoſſible to be performed. For as in *wheeling*, the whole battaile remaineth entire, and moueth circlewiſe about the right or left corner-fileleader, as about a Center; So in a Countermarch Lacedemonian it is broken, and beginneth to moue by ſeueral ranks, and continueth the motion in a direct line from the front to the reare, and not in a circle. But for the precepts of *Ælian* I purpoſe to explaine onely ſuch as are vſed by the Souldiers and Commanders of our time: And after taking of armes I hold this to be the firſt, at leſt when we begin to moue.

6 Advance your Pikes.

Pikes in ordering of a battaile muſt be firſt *advanced* before any motion can be performed, in as much as all other poſtures of the Pike doe hinder, or elſe are vnfit for tranſmutations and variety of changes, and from *advancing* the reſt of pike-poſtures doe ſpring. *Ordering* of the Pike was deuſed to eaſe the Souldier ſtanding ſtill; *ſhouldering*, to eaſe him in marching; *advancing*, to giue facility to the other poſtures, and to finiſh them, becauſe they both begin and end in it.

7 & 8. File and ranke your ſilues.

It is needleſſe to note, that no battaile can be without filing and ranking.

This

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This we muſt vnderſtand, that the Captaine is to ſee whether the Souldiers be filed and ranked; but the action it ſelfe pertaineth to the Souldiers, who knowing their files and ranks, are every man to take their place accordingly: for ſo ought it to be in true diſcipline of Warre.

9 Looke to your Leader.

The file leader is the life, and giuer of forme vnto the file. He is the life in that he moueth firſt, and draweth the reſt vnto the ſame motion; he giueth the forme vnto it, becauſe it being nothing elſe but a right line, his ſtanding, being the firſt point, directeth the reſt to follow lineally one after another. In this precept therefore *Looke to your Leader* two things are commanded, one that the reſt of the file ſhould obſerue to moue and ſtand ſtill, as he doth; the other, that they ſhould maintaine a ſtraightneſſe and rightneſſe in length, which is the forme of the file.

10 Reare-commander order your file.

See *Ælian* cap. 12.

In the Greeke Edition of *Ælian* is read *ἀρχηγός*, that is, file-leader. But in a Manuſcript, which I haue ſeene, is *ῥεαργός*, the bringer vp or reare-commander, and ſo is it read in *Leo* Taſticks; and I take it to be the true reading, this command rather appertaining to the reare-Commander, then to the file-leader: for the file-leader being the foremoſt of the file, and bearing his face out of the front, how can he ſee whether the file that is behinde him, be in right order or not. The bringer-up hath his face toward the whole file, as it ſtandeth out before him: and therefore may eaſily diſcerne if any man be in diſorder, and reforme them that are the cauſe of the diſorder. In which reſpect it is euident, that he is fitter for the command, then the file-leader; which is the cauſe, that I haue tranſlated the word of direction, as before, *Reare-commander order your file*.

See *Leo* cap. 5. 22.

11 Keepe your firſt diſtances. That is, ſtand in your open order. For in that diſtance is the exerciſe firſt leguene.

It is a ſeemly thing to ſee an euen proportion obſerued in the motion of a battaile, and to behold a direct pace betwixt files and ranks. For that is the grace and beauty (as I may terme it) of a Phalange ordered for fight. This proportion cannot be maintayned without obſeruing diſtance curiouſly. Open order is fixe foot both in ranke and file betwixt man and man every way. If then any ſouldier in file gather vp to his leader, and ſtand at diſtance of three foot, it is manifeſt, that his ranke is thereby diſturbed and made vneuen, although the file continue ſtreight. Contrariwiſe, if he bear himſelfe out of his place, three foot toward either of his ſide-men, by this meaſure he diſordereth his file and maketh it crooked. This fault if it were committed by many, a generall diſorder would follow in the body; and therefore *Ælian* well aduiſeth to keepe the firſt diſtances eſpecially till you be commanded to the ſecond or third diſtance, which will often fall out in the four motions. Of which Facing is the firſt; and the words of direction in it are theſe as before in *Ælian*.

See *Ælian* cap. 11.

22 Face

13 Face to the Pike.

See Ælian before
cap. 11.

That is, Face to the tight hand; For the pike was alwayes borne in the right hand.

14 Face to the Target.

The Pike-men in the Macedonian army bore targets on their left armes, or on the left side, so that facing to the target is all one with the word of command; Face to the left hand.

16 Face about to the pike or target.

That is, face about to the right or left hand. But where hee addeth [*more a little further*] he signifieth that the direction is not fully accomplished, and he would haue the souldiers continue their motion till their faces were fully come about to the reare; and then hee willett them so stand so, because they haue gayned their place. These facings here expressed by *Ælian*, are of the whole body. Other facings of the parts he hath not set downe, which notwithstanding are oftentimes of great vse. For say the enemy charge in front and reare; your front must continue as it did, but the word for the reare is:

a Halfe files face about to the right or left hand.

* The Amphipro-
mus Phalange.

If the enemy charge you on both flanks, then is the word of command.

b Halfe ranks face to the right, halft to the left hand.

* The Antipro-
mus Phalange.

If in front and one flank, the front standeth firme, and the word for the flank that is charged, is:

Halfe ranks of the right (or left) flank, Face to the hand named.

The Plesium.

If in front and both flanks, the front is to stand firme, and both the flanks to face to the enemy. And this is done in a hollow square or Plesium, and the word is:

Flanks face one to the right the other to the left hand.

If on all sides or round about, it is as before for the flanks: but for the reare,

The reare face about to the right or left hand.

Now in Countermarch of the reare, the ranke of file-leaders is oftentimes commanded to face about to the right or left hand; In countermarch of the front, the ranke of bringers vp must doe the like, as wee shall see in Countermarch. Doubling is the second motion vsed in battaile, the precept of it in this in *Ælian*.

Doubling.
a Motion.

18 Double

18 Double your depth.

The word in our exercise for this motion is, Double your files; because files measure the depth of the battaile, or ranks measure the length. This doubling is made many wayes. The first is, when the euen files (that is, the 2. 4. 6. 8. 10. file) fall into the odde; As if the doubling be to the right hand, the right hand corner-file standeth firme, and is the first after doubling; the third is the second file, the fifth the third, and so the rest of the odde files in order. But the manner is, that the leaders of the second file fall directly behind the leader of the first file, and the second man of the second file behind the second man of the first, and so the rest of those two files. The same order is for the rest of the euen files, when they double the odde files. And the word is:

See, Ælian cap.

Double your files to the right or left hand.

Another manner is, when halfe the body of files conueyes it selfe into the spaces of the other halfe of the body; be it to the right or left hand according to direction given; so that the first ranke of the halfe body, which is to moue, falls into the space next after the first ranke of the halfe body that standeth, and so the rest of the ranks of the halfe body that moueth, and the word is:

Halfe the body double your files to the right or left hand.

Another is, when files are doubled by a countermarch: As if the second file of the right or left hand (as it is appointed) countermarch, and the leader of that file place himselfe behind the bringer vp of the corner file to that hand, to which the doubling is to be made; and so the rest of the files of euen number, behinde those of odde number; as the second behind the first, the fourth behind the third, the sixth behind the fifth, and so the rest. The word is:

Double your files by countermarch to the right or left hand.

The next word in *Ælian* is

Double your length.

That is, double your ranks, or front: (For as I before noted, the ranks make the length of the battaile) which likewise is many wayes done. The first is, when the ranks of euen appellation, as the 2. 4. 6. 8. &c. fall out into the spaces of the odde, namely, into the spaces of the 1. 3. 5. 7. &c. which stand before them and place themselves euen with them in ranke. The word is:

Double your ranks to the right or left hand.

Another way is, when the bringers-vp (their halfe files following them.

13

by.

The Tactics of Ælian, or

by countermarch) aduance vp to the front, and place themſelues in the ſpaces betwixt the file-leaders to the hand appointed, and the reſt of the ranks accordingly, namely, the ninth ranke in the ſpaces of the ſecond, the eight in the ſpaces of the third, the ſeuenth in the fourth, the ſixth in the ſpaces of the fifth. And the word is :

Bringers vp, double your front by countermarch to the right or left hand.

Another is, when the reare-halfe-files, one halfe face to the right, the other to the left hand, and diuiding themſelues, march out till they bee paſt the flanks of the ſtanding halfe-files : Then facing to the front, ſleeue vp and front with the ſtanding halfe-files. Then the word is :

Reare halfe-files, double your front by diuiſion to the right and left hand.

Another way is, when the reare-halfe-files vndiuided, face to the hand appointed, and being beyond the flanke of the reſt of the body, face to the front and ſleeue vp, and ioyn in front with the ſtanding halfe-files. The word is :

Reare halfe-files, enter double your front to the right or left hand.

It is to be obſerued, that in all theſe motions of doubling ranks or front, the ſouldiers are to returne after their motion to their firſt poſture, which is done by facing about to the right or left hand, and then by mouing, and by recouering their firſt place. The word is :

As you were.

3 Motion.

Countermarch is the third motion vſed in the change of a battaile. The vſe and neceſſity thereof appeareth in Ælian before, and that there are two kinds, one by file, the other by ranke. The words of command that hee here ſetteth downe, are onely of countermarch by file, which may be reduced to two kinds, viz. the Countermarch of the front, and the Countermarch of the reare. That of the front hath likewise two kinds, the Lacedemonian and the Chorean : That of the reare onely one, and it is called the Macedonian Countermarch. Now Ælian's direction followeth.

20 The Lacedemonian Countermarch.

This is one of the Countermarches by file, and of the front. The manner is, that the file-leaders beginne the Countermarch and paſſe beyond the reare, their files following them. In our exerciſe the word is :

Countermarch the front to the right or to the left hand.

It is done after another fort alſo, as when the bringers vp face about to the right or left hand, and then the whole body facing about to the ſame hand, paſſe thorow the ſpaces of the bringers vp to the ſame hand and the ninth ranke, beginning the reſt of the ranks after one another, place themſelues e- uery particular man before his follower in the ſame file, till the file-leaders are firſt. The word is :

Bringers

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Bringers vp face to the right, or to the left hand. The reſt beginning at the ninth ranke, paſſe thorow to the ſame hand, and place euery man himſelfe before his follower.

As you were.

In Ælian followeth :

22 The Macedonian Countermarch.

We in our exerciſe tearme this Countermarch of the reare, and it is done in two manners : Firſt, when the bringers vp begin the Countermarch, and their files following, paſſe thorow the ſpaces of the file-leaders, till the file-leaders become the laſt of the file, and then the whole body face about, and ſtand. The word is :

Countermarch the reare to the right or left hand. Face about to the contrary hand, and ſtand.

The other when the file-leaders face about to either hand, and the reſt of the ranks beginning at the ſecond ranke, ſucceſſiueſly paſſe thorow the ſpaces of the file-leaders to the hand appointed, placing themſelues euery man behind his next leader, and facing about as they did. The word is :

File leaders face about, the reſt of the ranks paſſe thorow, and place your ſelves behind your next leaders.

The next in Ælian is :

24 The Chorean Countermarch.

This Countermarch is of the front, as I ſaid, but it keepeth the ground, that the body had before the file-leaders (their files following them) remoued to the places of the bringers vp, and the bringers vp to the places that the file-leaders had. The word is :

File-leaders, countermarch to the right or left hand, and ſtand, viz. when they come to the bringers vp.

Other Countermarches there are, which are not here ſet downe by Ælian, but are remembered in his Chapter of Countermarches ; of which the countermarch by ranks of the whole battaile is one, of which the termarch by ranks in the parts. And as in the Countermarch of the front the files were beginne to moue, ſo in Countermarch of the flanke, or reare, the ranks followed one another by file, ſo in Countermarch of the flanke, the files follow one another by ranke : that is, the ſouldiers of euery ranke follow one another. If you would countermarch the right flanke, ſo to change one ſide of the battaile for the other, the word is :

Countermarch the right flanke to the left hand.

The Tactics of Ælian, or

In countermarching the left flanke, the word is ;

Countermarch the left flanke to the right hand.

To countermarch the wings into the midst, both the vttermost corner-files are to moue toward the midst, their halfe ranks following them, and meeting in the midst to stand there, and face to the front ; and the word is ;

Countermarch your wings into the midst of the battaile.

Obserue, that in Countermarch by ranke, the three Countermarches *Macedonian*, *Lacedemonian*, and *Choræan* may be practised, as well as in Countermarch by file. If the flanke neereſt to the enemy begin the Countermarch, this the Macedonian countermarch, because it maketh a shew of shifting away. If the flanke furthest from the enemy begin, it is the Lacedemonian, in that it carrieth a semblance of falling on. But when one flanke countermarcheth, till it come iust vp to the other, and no further, it is the Choræan, because it keepeth the same ground.

The fourth Motion.

Wheeling is the fourth and last motion ; and it is vsed in the whole entire battaile, or in the parts thereof. *Ælian* giueth words of direction for the whole battaile onely, and they are these ;

Wheele the body to the Pike, or to the Target.

When the battaile is to wheele to the pike or right hand, the right hand corner file-leader is onely to turne his body by little and little to the right hand, facing euen with the ranke of file-leaders, till such time as hee haue gained the right hand aspect ; and the rest are to moue about him, making him the center, as it were, of their circled motion. If to the left hand, the left hand corner file-leader is to doe the like. The same order is of wheeling the battaile about to the right or left hand. *Ælian* (as I said) giueth here no other words of command, then for the wheeling of the whole body, yet are the wheelings of the parts of great vse ; for either the flanks are wheeled into the front, or the front into the flanks. The front is wheeled into the flanks, when we desire to forme the Antistomus Phalange to resist the enemy, giuing on both flanks. And then the two middlemost bringers vp are to stand, and the middle file-leaders to diuide themselves, and to moue halfe the battaile to the right, halfe to the left hand, making those two bringers vp the center of the motion. In this the word is :

Wheele the front into flanks by diuision.

If the flanks be to be wheeled into the front, the two middle file-leaders are to stand still, and the two halfe bodies to moue about them, one to the right hand, the other to the left, till the two flanks be in the front, and the front in the midst. This kind is practised when we would frame the Di-phalange Antistomus. The word is :

Wheele

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Wheele the flanks into the front.

It is to be remembred, that after euery motion a restitution to the first posture is to be commanded in these words ; *As you were.*

In facing you are to returne to the contrary hand, as if the command were to face to the right, in returning you come to the left.

In doubling you must doe the like.

In countermarch likewise, whether you countermarch the whole body, or the parcels thereof, you are to returne by the contrary hand.

After wheeling, there ought to be a facing to the same hand first before you returne, and then a returning the contrary way about the same corner file-leader, about whom the motion was first made. This is to be vnderstood of wheeling the whole body.

In wheeling the front into the flanks, after wheeling performed, the body before returning is to face to the Commander, then to returne about the same bringers vp, till all come to be as they were.

In wheeling the flanks into the front, after the wheeling is made, the body is to face likewise to the Commander, then facing about to the right or left hand to return to the first posture about the two middle file-leaders, as about their center.

Mic castus artemque repono.

FFXFS.



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